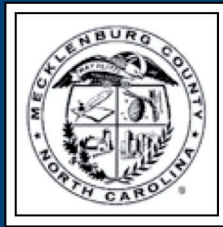


Mecklenburg County, N.C. Detention-Corrections Master Plan



July 2008



Submitted by:
Kimme & Associates, Inc.
with
Law & Policy Associates
and
The Justice Management Institute



ACKNOWLEDGEMENTS

The authors are very grateful to the many fine professionals associated with Mecklenburg County and Charlotte who made so many valuable contributions to this master plan. They apologize in advance for any omissions in the list of those individuals acknowledged below.

Mecklenburg County Board of County Commissioners

Jennifer Roberts, Chairman
H. Parks Helms, Vice-Chairman
Karen Bentley
J. Daniel Bishop
Dumont Clarke
Bill James
Norman A. Mitchell, Sr.
Dan Ramirez
Valerie C. Woodard

Executive Leadership

Harry L. Jones, Sr., County Manager
Janice Allen Jackson, General Manager
John McGillicuddy, General Manager
Bobbie Shields, General Manager
Michelle Lancaster, Associate General Manager
Nita Spears, Internal Audit Director

Project Managers, Office of the County Manager

Clayton T. Voignier, Assistant to the County Manager
Janet Payne, Assistant to the County Manager

Mecklenburg County Practitioner Work Group Members

Jennifer Ammons, Criminal Caseflow Coordinator
Tom Eberly, Jail and Justice Director, Mecklenburg County Sheriff's Office
Hon. Peter Gilchrist, District Attorney
Barton M. Menser, Deputy District Attorney
Todd Nuccio, Trial Court Administrator
Marc D. Towler, Assistant Public Defender/Felony Chief
Kevin Tully, Public Defender
Stephen W. Ward, Assistant District Attorney/Team Supervisor
Billy Wilson, Analyst, Office of the County Manager

Criminal Justice System Contributors

Grayce Crockett, Director, Area Mental Health
Connie Mele, Area Mental Health
Martha Curran, Clerk of Superior Court
Isabel Scott Day, Public Defender
Marsha L. Goodenow, ADA Team Supervisor
Robert P. Johnston, Senior Resident Superior Judge
Fritz Y. Mercer, Chief District Court Judge
Bob Ward, Assistant Public Defender
Jerry Sennett, Deputy Chief, Charlotte-Mecklenburg Police Department
Paul Paskoff, Research, Planning & Analysis Director, CMPD
Gregg Stahl, Senior Deputy Director, NC Administrative Office of the Courts
C. Colon Willoughby, Jr., Wake County District Attorney



Mecklenburg County N.C. Detention-Corrections Master Plan

Mecklenburg County Sheriff's Office

Sheriff Daniel Bailey
Chief Deputy Felicia McAdoo
Chief Deputy Wayne Shirley, Retired
Major Rodney Collins
Major Mike DeTommaso
Major Loretta Pagan
Major Walter Pummell, Jr.
Major Roy Rivers
Captain Donald Belk
Captain Michael Greer
Captain Mark Hinson
Captain Mike Matys
Captain Roger McCoy
Captain Mike Plummer
Captain Alfred Walker
Jan Thompson, Jail Programs
Thomas A. Eberly, Jail & Justice Director
Tana Calloway, WRRC Facility Administrator
Dorian Johnson, WRRC Screening Manager
Rachel Vanhoy, Sr. Fiscal Administrator
Donald Beck
Greg McCall
Tracey Bynum, ISD
Jeff Maner, IT Analyst
Tonya Jackson, IT Programmer-Analyst
Nancy S. Jones, IT Programmer-Analyst

Real Estate Services Department

Mark P. Hahn, AIA, Director
Gustavo E. Mibelli, AIA, Sr. Project Manager
Robert Lutz, Sr. Project Manager
Bryan Turner

K&A Project Team

Dennis A. Kimme, AIA, NCARB, Project Director
Dr. Teri K. Martin, LPA
Gary M. Bowker
James Rowenhorst
Dr. Barry Mahoney, JMI
Alan Carlson, J.D., JMI
John Hutzler, LPA

American University Technical Assistance Team

Joseph A. Trotter, Jr., Director, BJA Criminal Courts T.A. Project
Caroline Cooper, Associate Director, BJA Criminal Courts T.A. Project
Judge Andrew Sonner, retired
Judge Ronald Taylor, retired
David Cook, Chief Public Defender, Marion Co., IN
David Scott, retired Pennsylvania Commissioner of Corrections



TABLE OF CONTENTS

I. Introduction	1
A. Background	1
B. Master Planning Process	2
C. Master Plan History	3
D. Additional Studies	4
E. Description of Existing Facilities	4
II. Statistical Review of Jail Population and System Issues; Projections of Future Inmate Population	9
A. Historical Jail Population and Overcrowding	9
B. County Growth and the Jail Population	10
C. The Actual Extent of Overcrowding in Mecklenburg County	12
D. Intakes and Average Lengths of Stay (ALOS)	15
E. Inmate Length-Of-Stay Distribution	17
F. Court Data	19
G. State Charged and Federal Inmates	26
H. Sentenced Population	27
I. Female Population	27
J. Jail Population Projections	28
K. Projection of Intakes	31
III. Projected Facility Needs and Costs – Base Estimate	32
A. Introduction	32
B. Methodology	33
C. Delineation of Future Housing Needs	34
1. Inmate Classification	34
2. Classifications as Distributed Across the Current Population and Housing Characteristics	35
3. Housing Worksheets	37
a. Classification Housing Worksheets for the Year 2020 – Base Needs	39
b. Classification Housing Worksheets for the Year 2030 – Base Needs	41
4. New Pod Types	42
5. Functions Affiliated with Housing Pods	42
6. Housing Pod Breakdowns of the Future – Base Projection	44
D. Estimating Future Support and Gross Area Space Needs	45
1. Approach	45
2. Functional Component Worksheets	45
a. Central Facility Function Checklist	45
b. North Facility Function Checklist	51
c. WRRRC Function Checklist	55
3. Current Support Space Deficiencies per the Function Checklists	59
a. Current <u>Central</u> Facility Support Space Deficiencies and Needs	59
b. Current <u>North</u> Facility Support Space Deficiencies and Needs	63
c. Current <u>WRRRC</u> Facility Support Space Deficiencies and Needs	66
d. Summary of Support Space Deficiencies	68
4. Estimating Future Support Space Needs	68



E. Total Space Needs Estimates – Base Scenario.....	70
F. Cost Analysis – Base Projected Needs.....	71
1. Project Schedule.....	71
2. Construction and Project Costs and Inflation	72
a. Staffing and Operational Costs Estimates and Methodology	77
b. Shift Relief Fact a/k/a Net Annual Work Hours (NAWH) Used.....	78
c. Staff Estimates Based on Exact Staff Numbers.....	80
d. Staff Cost Estimates Based on Ratios of ADP or Intakes	81
e. Staff Cost Tables	82
G. Life Cycle Costs – Base Projected Needs.....	87
IV. Recommended Approaches to Managing Jail Population Size	90
A. Reducing the Volume of Admissions/Bookings.....	91
B. Reducing Pre-Disposition ALOS in Jail	97
C. Reducing the Pending Case Backlog.....	98
D. Supporting and Monitoring Jail Population Management Efforts	98
V. Projected Jail ADP Impacts of Implementing Mecklenburg Practitioners' Consensus Plan.....	101
VI. Modified Facility Space and Cost Scenario and Facility Options Per System Change Commitments	103
A. Introduction.....	103
B. Modified Housing-Classification Worksheets	103
C. Modified Pod Needs	105
D. Modified Space Estimates	106
E. Generic Construction and Project Cost Estimates - Modified Option.....	107
1. Phase 1 Costs	107
2. Phase 2 Costs	109
F. Modified Staffing and Staff Cost Estimates	110
G. Life Cycle Costs and Cost Avoidance	114
VII. County Endorsed Bed Capacity Expansion Approach and Facility Option Studies.....	117
A. County Preference for Facility Development.....	117
B. Three Primary Facility Options Examined	118
C. Revised Pod Breakdown	120
D. Option Analysis.....	120
1. Option 1, North – All Expansion at North Campus	120
2. Option 2, Central – Primary Expansion at Central Facility	124
3. Option 3, North/Central – Expand at Both North and Central	127
E. Intake Area Expansion.....	130
1. Option 1 - Expanding at Central	131
2. Option 2 – Rebuilding Under an Addition	132
3. Option 3 – Building a Satellite Facility	132
4. Option 4 – Rebuilding Intake at North	132
5. Summary	133



F. Cost Control Ideas	135
1. Building at North	135
2. Dry Cells	135
3. Modular Cells	135
4. Indirect Natural Lighting of Cells	136
5. Redundancy of Pod Design	137
6. Add Alternates	137
7. Shelling	137
VIII. Conclusion	138
A. Next Steps in the Process	138

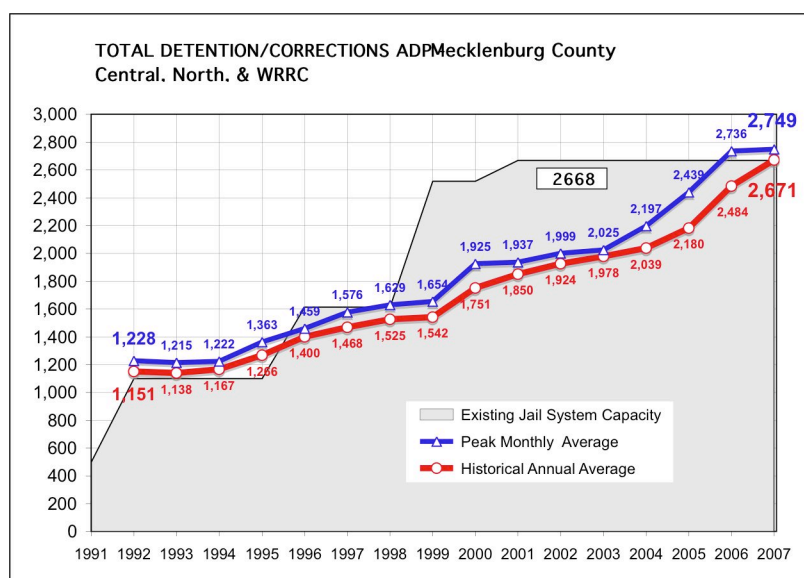


I. INTRODUCTION

A. BACKGROUND

This report presents an updated master plan for detention and correction facilities in Mecklenburg County. It builds upon the Master Plan prepared by the Kimme & Associates/Law & Policy Associates consultant team in 1990. The original master plan has been successfully implemented between then and now.

This update was motivated by rapid increases in the jail population that have begun to create overcrowded conditions, with many inmates sleeping in temporary beds on the floor. The county's goal has always been to operate safe, secure and standards-complaint facilities. County policymakers understand that overcrowding undermines those objectives and jeopardizes the safety and security of inmates, staff, and the public.



In documenting long-term facility and operational needs for the county's facilities, this master plan report also provides an analysis of the local criminal justice system. This analysis culminates in a series of policy change recommendations that the consultants, and the client, believe will reduce the long-term jail bed capacity needs of the county, thus avoiding the expenditure of tens of millions of dollars in future years.

This master plan is a product of a highly collaborative process involving many people within county government, the criminal justice system, and the local detention-corrections system operated by the Sheriff's Office. In particular, the significant changes to the criminal justice system recommended are changes that were developed in close cooperation with local criminal justice practitioners. These recommendations represent commitments from the practitioners to implement the changes and will be financially supported by the county.



Without the commitment of practitioners to significant changes in the ways cases are processed and resolved, and in pretrial release criteria and processes, the consultant team could not have recommended a modified and reduced master plan. Continued efforts to maximize court efficiency, minimize case backlogs, and operate an objective pretrial release system with a range of release options will be necessary in order to avoid future facility crowding that would put the county, its jail staff and inmates at risk

B. MASTER PLANNING PROCESS

The consultant team's general approach to detention-corrections master planning is to:

1. Develop a baseline projection of jail average daily population and resulting facility needs through the year 2030 assuming no changes in criminal justice system policies or procedures;
2. Discuss with detention staff their operational preferences and develop a description of a facility expansion plan complete with estimated construction, project, and operational costs.
3. Explore a range of options for managing detention population that could reduce future jail capacity needs without negatively affecting public safety;
4. Collaborate with County justice system policymakers to develop commitments regarding changes in policies, processes and practices that will be implemented;
5. Forecast future detention population and reduce the scope of facility and operational needs assuming that these consensus changes will be implemented and sustained; and
6. Provide a cost-avoidance analysis showing the differences in detention system capital and operating costs over the 23-year planning timeframe between the baseline and modified practice projections.

Should the system changes recommended not be fully implemented, then the new facilities recommended in this report will reach capacity sooner than expected. In turn, the county will need to provide additional facilities and staff much sooner than projected at the conclusion of this study.

On the other hand, if the policy changes agreed to are put in place, the consultants anticipate that criminal justice practitioners will be able to find even more ways to minimize the length of time it takes to resolve the cases of pretrial detainees, which would result in further reductions in detention population and space needs.

In executing this study Kimme & Associates, Inc. (K&A) and Mecklenburg County were fortunate to have the assistance of Law & Policy Associates (LPA) and the Justice Management Institute (JMI). They, in working closely with local practitioners, are principally responsible for the criminal justice system analysis, system change recommendations, and impact analysis reported in Chapter IV. That effort, and its results, were measurably enhanced by the technical assistance efforts of a consultant team from American University, who became involved at the suggestion of JMI's Dr. Barry Mahoney.

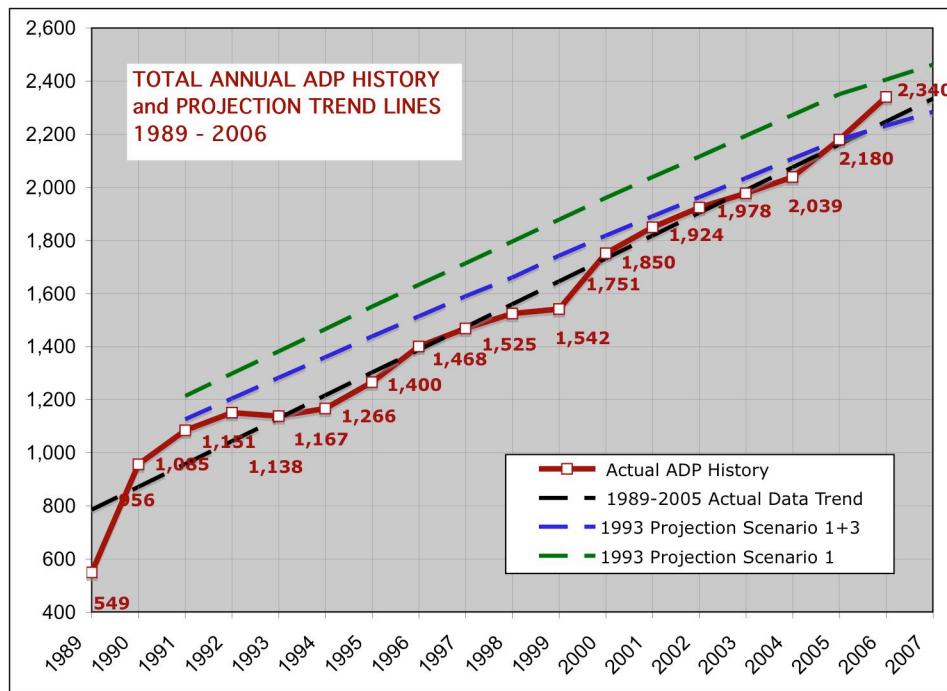


C. MASTER PLAN HISTORY

Historically, it is worth noting that Kimme & Associates, Inc. (K&A) and LPA were also involved in developing the 1990 Master Plan for Mecklenburg County detention-correction facilities. That master plan was presented in June 1990 under the title: Mecklenburg County Detention/Corrections Master Plan.

The original master plan recommended the demolition of the existing jail, replacement of the existing intake center, and abandonment of the satellite jail facility. In their place it recommended the creation of the Central facility on its current site, the creation of the North facility at Spector Drive, and the creation of the Work Release and Restitution Center (WRRC). K&A then worked with a sheriff's planning team to develop the space, operational and staff programs on which the Central and North facility designs were based.

The population projections developed at that time, and updated in 1993, successfully anticipated current average daily jail population based on trend lines and anticipated system changes identified in 1990. Below is a table that showed the original projected ADP and the actual ADP of the system:



The facilities recommended in the master plan were all built and the Central facility was expanded from its original capacity of 1,006 to its current capacity of 1,904 in 1999.



D. ADDITIONAL STUDIES

The consultants also had additional missions to fulfill in the detention-corrections master plan contract. One mission was to evaluate the current staffing model for the detention-corrections division of the sheriff's office and to make recommendations regarding that model. That study also looked at issues of recruitment and retention and made recommendations that would benefit the sheriff's office in reducing the amount of vacancies experienced. The study was called "Detention Division Staffing Plan Review" and was released in October 2007.

Another study completed by the consultants was an evaluation of sheriff's office needs in the downtown area. The consultant team evaluated existing space, interviewed staff regarding future needs, and proposed an outline of space needs for the future. This study was called "Assessment of Headquarters Office Space Needs" and was delivered to the county in September 2007.

These two additional reports were published separately and are not included in this report.

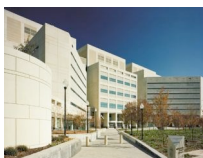
E. DESCRIPTION OF EXISTING FACILITIES

Mecklenburg County operates three adult detention-corrections facilities. They are referred to as 1.) the Central facility located in downtown Charlotte, 2.) the North facility located approximately 9 miles north of the Central facility, and 3.) the Work Release and Restitution Center (WRRC) located just one block from Central. These three facilities replaced the Main 376 bed downtown jail located on the current Central site, an intake center adjacent to the old Main jail, and a satellite facility intended to relieve overcrowding and accommodate low security work releases and weekenders.



The North facility was the first to be programmed, designed and built. It was opened in 1994. Its 614 beds were created to accommodate sentenced inmates. That purpose was modified to one of housing both pretrial and sentenced inmates when a change in state law dramatically reduced the sentenced inmate count, and when the pretrial count began to exceed pretrial housing capabilities at Central. The facility is being expanded as

this report is being written to add 108 beds for youthful offenders and 640 beds for sentenced and pretrial inmates. The 108 beds are permanent construction attached to the existing building and the 640 beds are in two detached pre-engineered buildings manufactured by Sprung Instant Structures, Ltd. At present, no female inmates are housed at North.



The Central facility replaced the old Main jail in a phased construction process that had to be completed around the Main Jail while it was still operational. The 1,006 bed facility was opened in February of 1997. It was expanded to add 898 beds and has a current capacity of 1,904. It houses both male and female adult inmates.



The WRRC was created to accommodate county sentenced inmates permitted to participate in a work release program. The facility provides 150 beds, 30 of which are designated for female offenders. Intensive programming is a feature of this low security, yet secure, facility.



Below is a summary of current and future bed capacity per current construction.

PODS/BEDS/CLASSIFICATION BY LOCATION SUMMARY:

EXISTING BEDS	Cell Capacity	PODS	Direct Supervision	Podular Remote
CENTRAL	1,904	39	1,320	584
NORTH	614	11	503	111
WRRC	150	3	150	0
SYSTEM TOTALS	2,668	53	1,973	695
		Pods	74.0%	26.0%

UNDER CONSTRUCTION	Cell Capacity	PODS	Direct Supervision	Podular Remote
NORTH - Youthful Offender Addition	108	9	108	0
NORTH - SPRUNG Structures Addition	640	16	640	0
FUTURE NORTH TOTALS	1,362	25	748	0
FUTURE SYSTEM TOTALS	3,416	78	2,721	695
		Pods	79.7%	20.3%

The facilities extensively utilize the direct supervision style of inmate management. To fully exploit this concept and maximize the effect of the environment on inmate behavior, the county, with this consultant, developed the "dry cell" concept. This concept dramatically reduces cell construction and maintenance costs, while normalizing the cell environment. It fully realizes the operational benefits of single occupancy: accountability, protection from sexual and physical predation, property protection, reduction of fear, and privacy. Housing pods featuring direct supervision and dry cells are reserved for compliant inmates and is, indeed, an incentive for the good behavior that is key to safety, security, and liability reduction. Other housing units are more physically harsh by contrast, which also provides a deterrent to bad behavior, and an incentive for good behavior.

The sheriff's jail staff have had great success with the single occupancy, dry cell direct supervision housing and management concept. They are committed to this approach and foresee it being utilized extensively in future facilities.

Each of the three facilities are well-conceived, well designed, and effectively operated. They are state-of-the-art facilities that serve as models to other jurisdictions. The physical plants are well-maintained and are fully compliant with state standards and national accreditation criteria per the American Correctional Association. Their principal deficiencies in 2008 are in 1.) a simple lack of bed capacity in the face of rapidly rising populations, 2.) the need for additional beds in direct supervision compatible classifications (to be discussed later), and 3.) program and support space for which needs have arisen as the nature of populations



and the emphasis on inmate programs have changed over the years (also to be discussed later).

Below is a table that identifies all of the housing capacity and pod distribution found in the three existing facilities by facility as they stood in 2007. Various inmate classifications are highlighted by different colors. Note that some pods are sub-divided into units within the pod. Direct Supervision housing pods are not sub-divided into units. Each pod represents a discrete set of spaces that function separately from other pods. Pods are generally managed by at least one officer per shift at all times.

At Central the housing provided in the addition can be recognized by pod unit numbers in the _700, _800, and _900 series as recorded in the "Location" column.



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG COUNTY, NC

2/29/08

PODS/BEDS/CLASSIFICATION BY LOCATION in 2007

CENTRAL

Level	Location	Classification	Facility	POD SIZE	Cell Capacity	Supervision	Occupancy	Plumbed/ DRY
Ground	G8-15	Weekender	Central	50	50	Pod remote	DORM	
	G8-30	Inmate Workers	Central	50	50	Pod remote	DORM	
	G8-45	Inmate Workers	Central	10	10	Pod remote	DORM	
1	1700	Minimum	Central	28	28	DIRECT	Single	DRY
	1800	Minimum	Central	54	54	DIRECT	Single	Plumbed
	1900	Minimum	Central	48	48	DIRECT	Single	Plumbed
2	2200.2210	Medical	Central	63	20	Pod remote	DORM	
	2200.2220	Medium	Central		20	Pod remote	DORM	
	2200.2230	Protective Custody-Keep Separate	Central		7	Pod remote	Single	Plumbed
	2200.2240	Medium	Central		16	Pod remote	DORM	
	2300	Medical Infirmary - Female	Central	19	7	Pod remote	Single	Plumbed
	2300	Medical Infirmary - Male	Central		12	Pod remote	Single	Plumbed
	2500.2510	Medical Minimum/Medium	Central	52	8	Pod remote	DORM	
	2500.2520	Medical Minimum/Medium	Central		4	Pod remote	DORM	
	2500.2530	Medical Minimum/Medium	Central		4	Pod remote	Single	Plumbed
	2540.2550	Medical Maximum	Central		10	Pod remote	Single	Plumbed
	2540.2570	Medical Minimum/Medium	Central		10	Pod remote	DORM	
	2540.2580	Medical Minimum/Medium	Central		8	Pod remote	DORM	
	2540.2590	Medical Minimum/Medium	Central		8	Pod remote	DORM	
	2700	Medium	Central	28	28	DIRECT	Single	DRY
3	3100	Classification Orientation	Central	48	48	DIRECT	Single	Plumbed
	3200	Classification Orientation	Central	48	48	DIRECT	Single	Plumbed
	3300	Medium	Central	56	56	DIRECT	Single	DRY
	3500	Medium 3, 4	Central	56	56	DIRECT	Single	DRY
	3600.3630	DDU	Central	46	23	Pod remote	Single	Plumbed
	3600.3630	Protective Custody	Central		9	Pod remote	Single	Plumbed
	3600.3640	Step Down	Central		14	Pod remote	Single	Plumbed
	3700	Medium 3, 4	Central	56	56	DIRECT	Single	DRY
	3800	Medium 3, 4	Central	54	54	DIRECT	Single	Plumbed
	3900	Medium	Central	48	48	DIRECT	Single	Plumbed
4	4100	Classification Orientation	Central	48	48	DIRECT	Single	Plumbed
	4200	Classification- FEDERAL	Central	48	48	DIRECT	Single	Plumbed
	4300	Medium 4	Central	56	56	DIRECT	Single	DRY
	4500	Min./Inmate Workers Female	Central	56	56	DIRECT	Single	DRY
	4600.4625	DDU Female	Central	48	23	Pod remote	Single	Plumbed
	4600.4630	DDU/PO Female	Central		9	Pod remote	Single	Plumbed
	4600.4640	Youth Offender, Female	Central		16	Pod remote	Single	Plumbed
	4700	Minimum/Medium Female	Central	56	56	DIRECT	Single	DRY
	4800	Classification, Medium Female	Central	54	54	DIRECT	Single	Plumbed
	4900	Minimum/Medium Female	Central	48	48	DIRECT	Single	Plumbed
5	5100.5120	Maximum 1-Close Custody	Central	46	16	Pod remote	Single	Plumbed
	5100.5130	Maximum 2 High Custody	Central		30	Pod remote	Single	Plumbed
	5300	Substance Abuse Treatment Med 3, 4	Central	56	56	DIRECT	Single	DRY
	5500	Medium 3, 4	Central	56	56	DIRECT	Single	DRY
	5600.5625	DDU	Central	46	23	Pod remote	Single	Plumbed
	5600.5630	Medical	Central		9	Pod remote	Single	Plumbed
	5600.5640	Maximum	Central		14	Pod remote	Single	Plumbed
	5700	Substance Abuse	Central	56	56	DIRECT	Single	DRY
	5800	Medium	Central	54	54	Pod Remote	Single	Plumbed
	5900	Minimum	Central	48	48	DIRECT	Single	Plumbed
6	6100.6120	Maximum 1-Close Custody	Central	46	16	Pod remote	Single	Plumbed
	6100.6130	Maximum 1-Close Custody	Central		30	Pod remote	Single	Plumbed
	6300	Medium 3, 4	Central	56	56	DIRECT	Single	DRY
	6500	Medium	Central	56	56	DIRECT	Single	DRY
	6700	Medium 3, 4	Central	56	56	DIRECT	Single	DRY
	6800	Medium 3, 4	Central	54	54	Pod Remote	Single	Plumbed
	6900	Medium 3, 4	Central	46	46	DIRECT	Single	Plumbed

TOTALS CENTRAL:

39
Pods
1,904
69.3%
DIRECT

NORTH:

Level	Location	Classification	Facility	POD SIZE	Cell Capacity	Supervision	Occupancy	Plumbed/ DRY
1	NHA	Youthful Offenders	North	56	56	DIRECT	Single	DRY
	NHB	Youthful Offenders	North	56	56	DIRECT	Single	DRY
	NHC	Inmate workers-Kitchen	North	56	56	DIRECT	Single	DRY
	NHD	Medium 3, 4	North	56	56	DIRECT	Single	DRY
2	NHE	Medium 3, 4	North	56	56	DIRECT	Single	DRY
	NHF	Medium 3/4/5A	North	56	56	DIRECT	Single	DRY
	NHG	Medium 3, 4	North	56	56	DIRECT	Single	DRY
	NHH	Minimum	North	56	56	DIRECT	Single	DRY
2	NHK-1	DDU Adult	North	56	24	Pod Remote	Single	Plumbed
	NHK-2	Youthful Offender DDU	North		16	Pod Remote	Single	Plumbed
	NHK-3	Step Down-ADU Refusal to Work	North		16	Pod Remote	Single	Plumbed
2	NHL	Inmate Workers	North	55	55	DIRECT	Single	Plumbed
2	NHM-2	Youthful Offender PC	North	55	6	Pod Remote	Single	Plumbed
	NHM-3	PCU	North		16	Pod Remote	Single	Plumbed
	NHM-4	Minimum	North		24	Pod Remote	Single	Plumbed
	NM1	Youthful Offender Max	North		9	Pod Remote	Single	Plumbed

TOTALS NORTH:

11
Pods
614
81.9%
DIRECT

WRRC:

Level	Location	Classification	Facility	POD SIZE	Cell Capacity	Supervision	Occupancy	Plumbed/ DRY
1	Pod 1	Females	WRRC	30	30	DIRECT	Single	DRY
2	Pod 2	Males	WRRC	60	60	DIRECT	Single	DRY
4	Pod 3	Males	WRRC	60	60	DIRECT	Single	DRY

TOTALS WRRC:

3
Pods
150
100.0%



Mecklenburg County N.C. Detention-Corrections Master Plan

Below are tables identifying the distribution of capacity of the two new facilities under construction at North.

FUTURE PODS/BEDS/CLASSIFICATION BY LOCATION

NORTH, Youthful Offender Addition:

Level	Location	Classification	Facility	Cell Capacity	POD SIZE	Supervision	Occupancy	Plumbed/ DRY
1	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed
	NEW	Youthful Offenders	North	12	12	DIRECT	Single	Plumbed

TOTALS, Y.O. ADDITION:

108

9

Pods

108

100.0%

DIRECT

NORTH, Sprung Structure Addition:

Building	Location	Classification	Facility	Cell Capacity	POD SIZE	Supervision	Occupancy	Plumbed/ DRY
1	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
2	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	
	NEW	Minimum/Medium	North	40	40	DIRECT	DORM	

TOTALS, SPRUNG STRUCTURES ADDITION:

640

16

Pods

640

100.0%

DIRECT



II. STATISTICAL REVIEW OF JAIL POPULATION AND SYSTEM ISSUES; PROJECTIONS OF FUTURE INMATE POPULATION

A. HISTORICAL JAIL POPULATION AND OVERCROWDING

Overcrowding poses a significant challenge to the successful operation of the Mecklenburg County detention-corrections system. Overcrowded facilities fundamentally undermine the ability of staff to insure the safety and security of inmates, staff, and the public. Overcrowding presents the single greatest liability risk to a county, raising the specter of law suits, consent decrees, and court oversight of county jail operations. In the past three decades overcrowding is the most common reason why jurisdictions throughout the United States have been sued over the conditions of their jail facilities.

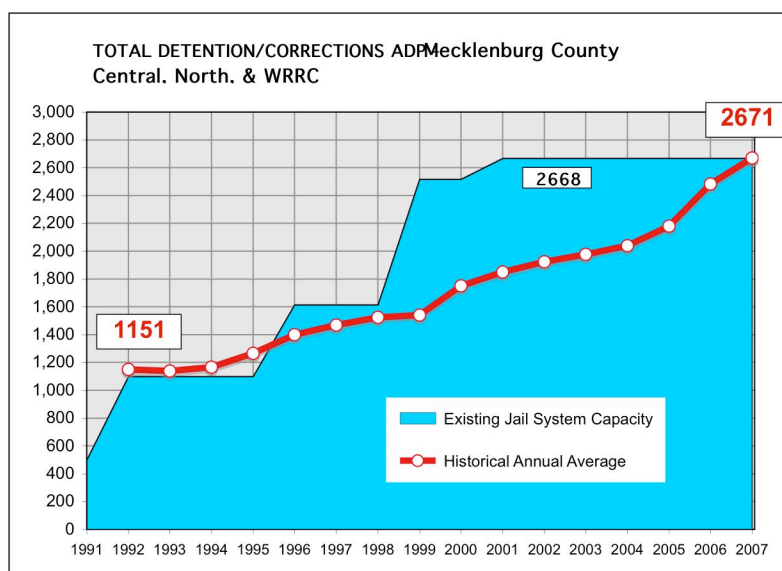
As the consultant team began to evaluate the situation in detail it was clear that strong and significant increases in the county jail population have placed the county in an overcrowded condition that is rapidly worsening.

During the 1983-2007 timeframe the average annual jail population rose from 290 inmates to 2,671 inmates, an increase of 821%. That average was three inmates above the total rated capacity of 2,668, and was the first year the annual average exceeded the bed capacity count.

The highest monthly average daily population in 2007 was 2,749, or 81 above bed capacity, for a 103% occupancy rate.

The high day count for 2007 was 2,867, which was 199 inmates above capacity for a 107.5% occupancy rate.

The chart and table below document the growth in annual average daily population (ADP) from 1983 through 2007. Calendar year (CY) figures are used.



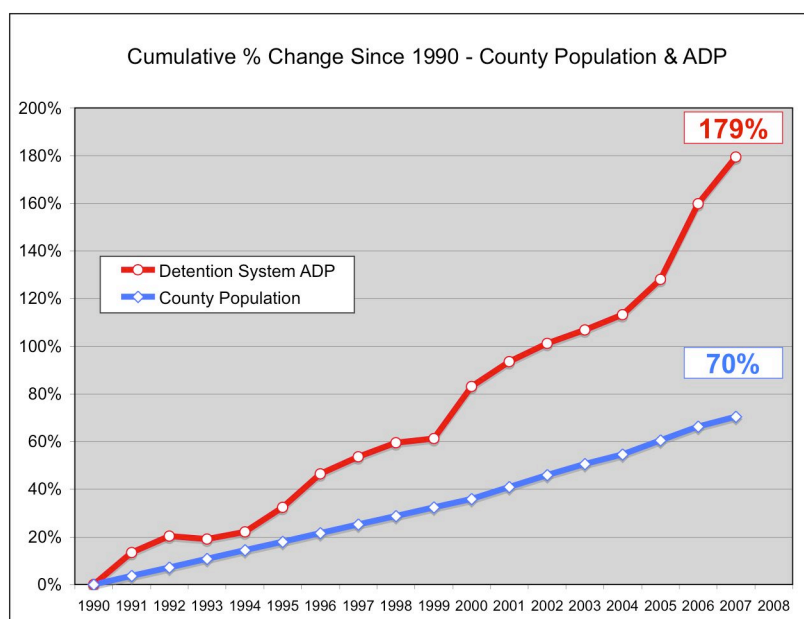
Year	1990-07 CY ADP
1983	290
1984	325
1985	419
1986	465
1987	558
1988	595
1989	697
1990	956
1991	1,085
1992	1,151
1993	1,138
1994	1,167
1995	1,266
1996	1,400
1997	1,468
1998	1,525
1999	1,542
2000	1,751
2001	1,850
2002	1,924
2003	1,978
2004	2,039
2005	2,180
2006	2,484
2007	2,671



To its great credit, Mecklenburg County has always tried to stay ahead of the population curve as can be seen in the chart above. The typical county fall dreadfully behind in providing needed capacity and only acts when a crisis is upon them.

B. COUNTY GROWTH AND THE JAIL POPULATION

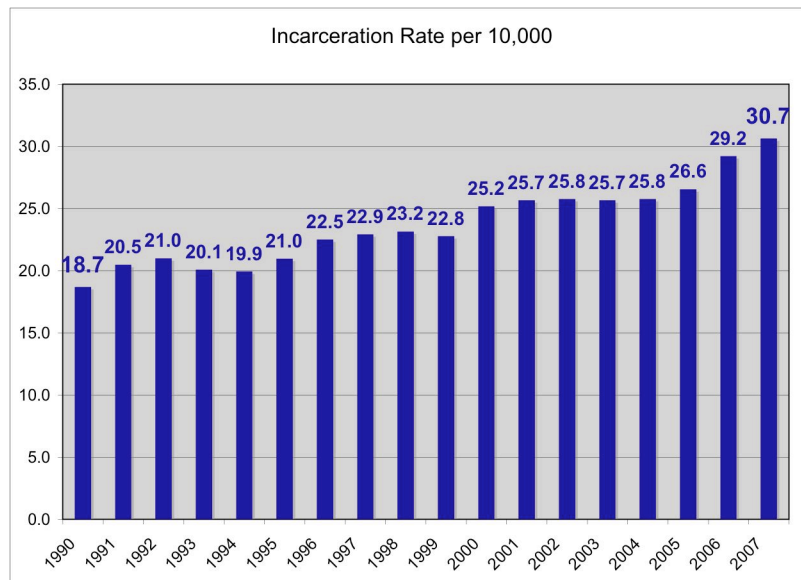
Everyone living in Mecklenburg County knows that it is a fast growing community. Thus it would be reasonable for them to assume that the rapid growth in jail population has merely matched that of county population growth. However, the data reveals that the jail population has grown much faster than the county. Since 1990 Mecklenburg County's jail population has grown by 179% while the general county population grew 70%.



As a result of this faster pace the jail incarceration rate per 10,000 county population has steadily risen from 18.7 days per inmate in 1990 to 30.7 days per inmate in 2007, or by 64%. Put another way, had the ALOS been able to remain unchanged between 1990 and 2007, the ADP for 2007 would have been 1,627 rather than 2,671.



Mecklenburg County N.C. Detention-Corrections Master Plan



Mecklenburg County's jail incarceration rate per 10,000 paralleled a similar growth rate in the national jail incarceration rate. The County's incarceration rate was on average about 15% higher than the national average during this period.

As one looks ahead growth is a major factor in Mecklenburg County and is forecast to continue. One can expect the jail population to grow with it and, if recent experience is a lesson, exceed it. Thus projected county growth is a significant element to consider in projecting future needs.

The table below documents growth rates and population estimates between 2002 and 2009 for Mecklenburg County, the state and other North Carolina counties with over 200,000 people. The Mecklenburg rate of growth is bested only by Wake County and is well ahead of the state wide average in a what is clearly a fast growth scenario.

Projected Annual County Population Totals - North Carolina									
Growth '02-'09	Jurisdiction	July 2002	July 2003	July 2004	July 2005	July 2006	July 2007	July 2008	July 2009
22.7%	WAKE	680,571	702,662	724,752	746,842	768,933	791,023	813,113	835,203
19.7%	MECKLENBURG	734,390	755,021	775,653	796,285	816,917	837,550	858,181	878,814
13.6%	GUILFORD	432,412	440,793	449,174	457,555	465,936	474,317	482,698	491,079
12.5%	NORTH CAROLINA	8,336,829	8,485,802	8,634,777	8,783,752	8,932,717	9,081,696	9,230,665	9,379,637
11.4%	BUNCOMBE	212,044	215,496	218,947	222,398	225,850	229,301	232,753	236,205
10.1%	DURHAM	231,434	234,780	238,126	241,472	244,818	248,165	251,511	254,857
9.4%	FORSYTH	314,540	318,751	322,960	327,170	331,379	335,589	339,798	344,008
8.6%	CUMBERLAND	304,855	308,620	312,387	316,153	319,918	323,684	327,450	331,216

Growth projections by the U.S. Census Bureau have the county growing to 1,107,790 people by 2020. Local Chamber of Commerce estimates have the county reaching a comparable 1,116,225 people by 2014. The Chamber projects 1,600,000 people by 2027.



C. THE ACTUAL EXTENT OF OVERCROWDING IN MECKLENBURG COUNTY

ADP figures from CY 2007 show an average daily population of 2,671 compared with the 2,668 beds available during the 2006-07 time period. Therefore, the ADP was only three inmates above capacity perhaps suggesting to some people that there is an insignificant crowding problem. However, the problem of not just having enough bed capacity, but of having the right kind of capacity with respect to appropriately analyzing overcrowding is revealed when one looks at the classification numbers in Mecklenburg County.

In addition to the overall peak data documented in the preceding section, a detailed 38 day sample of inmate classification breakdown data from the period of July 1, 2006 through July 11, 2007 was collected and analyzed by the consultant team.

During that sample period the daily count was actually greater than capacity on 17 of the 38 days sampled (45%). The day with the highest count had 113 inmates more than bed capacity for a 104.2% occupancy rate.

If the relatively uncrowded, low security Work Release facility and its population is removed from the equation so that a better look can be had at the very different classification and security issues presented at Central and North, a very different picture emerges.

Of the 38 sample days, 23 now show a combined inmate count at Central and North higher than the remaining 2,518 beds of capacity (61%). The peak day of crowding saw 190 more inmates than beds (107.5% occupancy rate). The ADP was an average of 36 over the bed count, for a 101.4% average occupancy level.

Practicing classification and separation seriously essentially means that not every open bed is filled by just any available inmate. Because there is a new inmate and the only bed available is a minimum security bed, it is not automatically the case that classification criteria will be compromised and the new inmate assigned to it. If the inmate is classified as a maximum security risk, for example, he or she will not be assigned to that available minimum security bed.

In Mecklenburg County the result of this practice, which is fundamental to preserving safety and security and reducing county liability, is that actual crowding is more severe than the overall numbers would indicate.

Where severe overcrowding really appears is in 14 direct supervision pods, nine of which are at Central and five of which are at North. These pods are all dry cell pods, have 56 single occupancy cells each, and are used for inmates classified medium and minimum security. These 14 pods have a total capacity of 784 beds yet held an average of 1,082 inmates per day based on the 38 day sample. That is 298 more inmates than the pods were designed to accommodate, an occupancy rate of 138%. The ADP per pod was 77.3, or 21.3 more inmates per day greater than bed capacity.



The highest single day count for the 14 pods was 1,145, or 361 inmates more than there were beds for. That is a very problematic 146% occupancy rate. The highest single day count for a single pod was 87, and 12 of the 14 pods recorded highs of 86 to 87. The summary table below outlines these facts.

MEDIUM & MINIMUM DIRECT SUPERVISION PODS (Central & North)			
(38 day sample from period of July 1, 2006 through July 11, 2007)			
ADP of 14 DIRECT SUPERVISION, 56 BED MINIMUM-MEDIUM PODS =	1,082		
BEDS AVAILABLE =	784		
AVERAGE DAILY OVERCROWDING =	298	+38.0%	
HIGH DAY COUNT =	1,145		
HIGH DAY OVERCROWDING =	361	+46.0%	
AVERAGE POPULATION PER POD =	77.3		
BEDS PER POD =	56		
AVERAGE POD OVERCROWDING =	21.3	+38.0%	
HIGHEST COUNT ON ONE POD =	87		
BEDS PER POD =	56		
HIGH DAY POD OVERCROWDING =	31	+55.4%	
ADP OF REMAINING NORTH & CENTRAL POPULATION =	1,458		
NON-MINIMUM-MEDIUM BEDS AT CENTRAL/NORTH =	1,734		
UNDERCROWDING DUE TO CLASSIFICATION CONSIDERATIONS =	-276	-15.9%	
OVERCROWDING-UNDERCROWDING DIFFERENCE AT CENTRAL/NORTH =	22	+0.9%	

The reason for this specific degree of pod overcrowding in the face of an overall ADP not much higher than overall capacity is a.) the county follows its classification system and does not house medium-minimum inmates with disciplinary detainees, mentally ill inmates, or other special categories of inmate where beds may be available, and b.) there are far more medium-minimum security inmates than there are properly designed housing pods for them.

As a result of a properly designed and implemented classification system, the county's jail overcrowding problem at the North and Central facilities is thus far more serious than it would appear from reviewing overall average system numbers versus total system bed capacity. This issue is the reason why there are so many inmates on the floor at both the North and Central facilities. However, the consultants want to be clear in stating that the County's position regarding inmate classification is admirable. More importantly it is correct in terms of reducing liability and providing for the safety and security of staff and inmate alike.

Because of the actual overcrowding occurring, the consultants concluded that the jail system had a 400-500 bed shortfall in 2007, even though the overall ADP was three inmates above overall bed capacity for 2007, and 40 inmates under capacity in the 38-day sample.

The Sprung structures that the county is erecting at the North campus as this report is being written, will provide 640 beds, more than enough to accommodate the current crowding problem in direct supervision pods.



Mecklenburg County N.C. Detention-Corrections Master Plan

In dealing with the overcrowding the system has purchased temporary plastic beds often referred to as "boats" within the profession because of their shape and appearance. Below is a picture of the overcrowding and the use of "boats" "on-the-floor". These inmates are in the common areas of the jails while their luckier pod-mates reside within secure single occupancy cells.



Inmates sleeping on the floor in an overcrowded direct supervision housing pod.

The chart below documents the ADP and peak counts as recorded at the Mecklenburg County's three detention-corrections facilities. Again, the ADPs and peaks tell a different story about overcrowding than do the generalized overall numbers. Note that in 2007 there was an average of 399 inmates "on-the-floor" on a daily basis with a peak of 586 inmates.

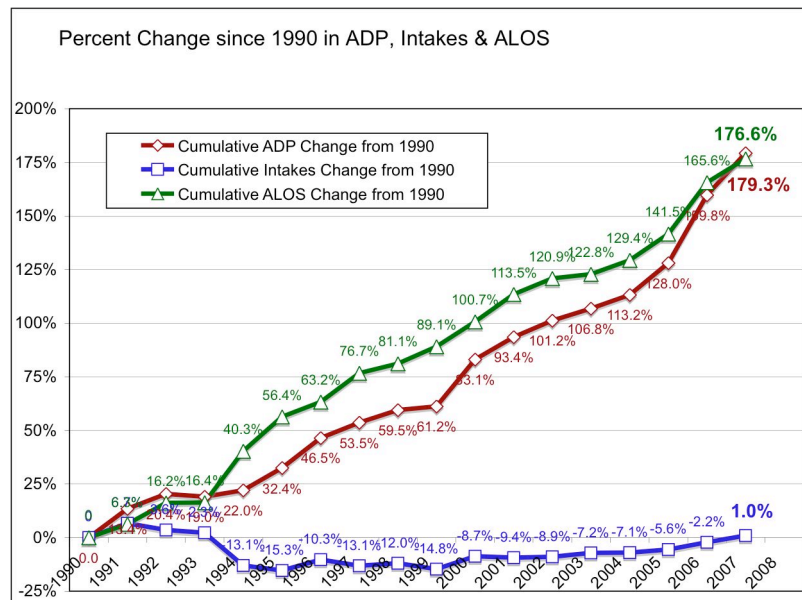
MECKLENBURG COUNTY, NC 2007 ADP BREAKDOWN

Facility:	Bed Capacity	ADP	PEAK Count	PEAK Occupancy Rate	ADP Occupancy Rate	PEAK/ADP
North	614	650.6	770	125%	106%	118%
Central	1,904	1,918.5	2,104	111%	101%	110%
WRRC	150	86.7	103	69%	58%	119%
Total	2,668	2,662.8	2,867	107%	99.8%	108%
On the Floor		398.9	586			



D. INTAKES AND AVERAGE LENGTHS OF STAY (ALOS)

The following chart and table shows that while the number of jail intakes has remained relatively stable since 1990, average length of stay (ALOS) has grown at about the same rate as average daily population (ADP). Clearly, it is the increase in ALOS that has driven the rise in ADP over the last 17 years.



JAIL DATA SUMMARY ADP, Intakes, Average Length-of-Stay Mecklenburg County, NC

1990-2007

Year	ADP**			INTAKES**			ALOS***		
	System ADP	Annual % Change in ADP	Cumulative ADP Change from 1990	Intakes	Annual % Change in Intakes	Cumulative Intakes Change from 1990	ALOS (in days)***	Annual % Change in ALOS	Cumulative ALOS Change from 1990
1990	956	-	-	43,570	-	-	8.0	-	-
1991	1,085	13.4%	13.4%	46,480	6.7%	6.7%	8.5	6.3%	6.3%
1992	1,151	6.1%	20.4%	45,135	-2.9%	3.6%	9.3	9.3%	16.2%
1993	1,138	-1.1%	19.0%	44,571	-1.2%	2.3%	9.3	0.1%	16.4%
1994	1,167	2.5%	22.0%	37,879	-15.0%	-13.1%	11.2	20.6%	40.3%
1995	1,266	8.5%	32.4%	36,896	-2.6%	-15.3%	12.5	11.4%	56.4%
1996	1,400	10.6%	46.5%	39,101	6.0%	-10.3%	13.1	4.4%	63.2%
1997	1,468	4.8%	53.5%	37,858	-3.2%	-13.1%	14.2	8.3%	76.7%
1998	1,525	3.9%	59.5%	38,359	1.3%	-12.0%	14.5	2.5%	81.1%
1999	1,542	1.1%	61.2%	37,141	-3.2%	-14.8%	15.1	4.4%	89.1%
2000	1,751	13.6%	83.1%	39,758	7.0%	-8.7%	16.1	6.1%	100.7%
2001	1,850	5.6%	93.4%	39,478	-0.7%	-9.4%	17.1	6.4%	113.5%
2002	1,924	4.0%	101.2%	39,690	0.5%	-8.9%	17.7	3.5%	120.9%
2003	1,978	2.8%	106.8%	40,445	1.9%	-7.2%	17.8	0.9%	122.8%
2004	2,039	3.1%	113.2%	40,494	0.1%	-7.1%	18.4	3.0%	129.4%
2005	2,180	6.9%	128.0%	41,129	1.6%	-5.6%	19.3	5.3%	141.5%
2006	2,484	13.9%	159.8%	42,610	3.6%	-2.2%	21.3	10.0%	165.6%
2007	2,671	7.5%	179.3%	43,994	3.2%	1.0%	22.2	4.1%	176.6%
2008									
average:		6.32%			0.2%			6.27%	
maximum:	2,671			46,480			22.2		
minimum:	956			36,896			8.0		

* ADP = Average Daily Population

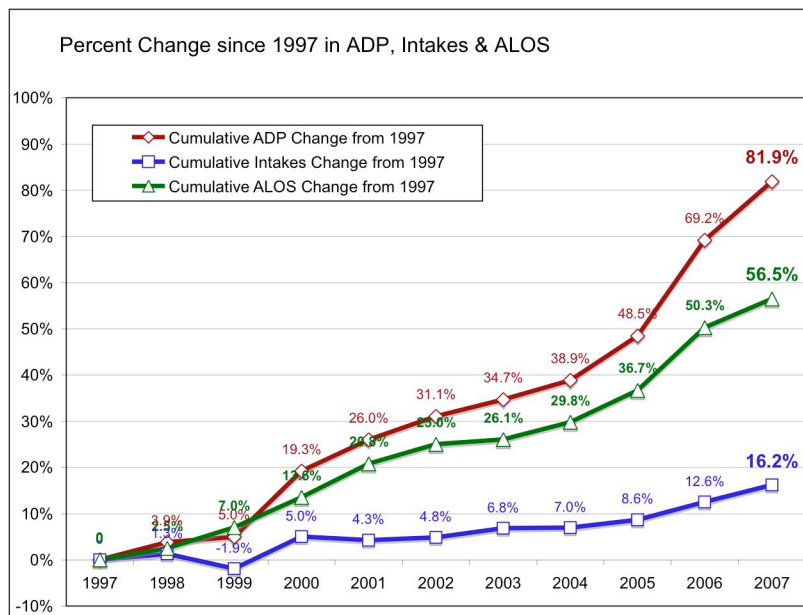
** Intakes, not Admissions into custody. Admissions is a lower figure

*** ALOS = Average Length of Stay



Mecklenburg County N.C. Detention-Corrections Master Plan

When one examines the more recent past, 1997-2007, one finds that an increasing number of intakes now make a minor contribution to the increase in ADP but that increase in ALOS is still the dominant factor IN ADP growth over the last ten years.



1997-2007								
Year:	ADP:			INTAKES:			ALOS:	
	System ADP*	Annual % Change in ADP	Cumulative ADP Change from 1997	Intakes **	Annual % Change in Intakes	Cumulative Intakes Change from 1997	ALOS (in days)***	Cumulative ALOS Change from 1997
1997	1,468	0	0	37,858	0	0	14.2	0
1998	1,525	3.9%	3.9%	38,359	1.3%	1.3%	14.5	2.5%
1999	1,542	1.1%	5.0%	37,141	-3.2%	-1.9%	15.1	7.0%
2000	1,751	13.6%	19.3%	39,758	7.0%	5.0%	16.1	13.6%
2001	1,850	5.6%	26.0%	39,478	-0.7%	4.3%	17.1	20.8%
2002	1,924	0.0%	31.1%	39,690	0.0%	4.8%	17.7	25.0%
2003	1,978	2.8%	34.7%	40,445	1.9%	6.8%	17.8	26.1%
2004	2,039	3.1%	38.9%	40,494	0.1%	7.0%	18.4	29.8%
2005	2,180	6.9%	48.5%	41,129	1.6%	8.6%	19.3	36.7%
2006	2,484	13.9%	69.2%	42,610	3.6%	12.6%	21.3	50.3%
2007	2,671	7.5%	81.9%	43,994	3.2%	16.2%	22.2	56.5%
2008								
average:		5.84%			1.49%			4.26%
maximum:	2,671			43,994			22.2	
minimum:	1,468			37,141			14.2	



E. INMATE LENGTH-OF-STAY DISTRIBUTION

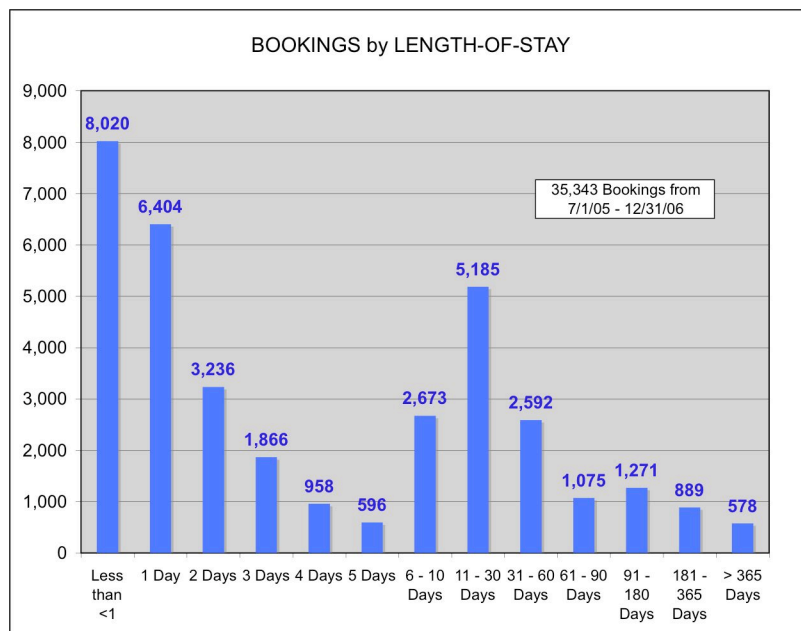
A tracking analysis conducted by the Research and Planning Unit of the Sheriff's Office during the week of December 10, 2006 indicated that almost four out of every ten persons arrested and booked into the jail were charged with relatively low-level offenses (misdemeanors or traffic violations). Many of these persons remain in the jail for relatively short periods of time (e.g., one or two days), and in many instances these persons do not pose a significant risk of danger to the community or of flight to avoid prosecution.

As the table below shows, 41 percent of the persons released from the jail during a recent time frame have been there for one day or less following admission. Another 9 percent were released within two days following admission for a total of 50%. This high turnover rate suggests that there is ample opportunity to reduce the number of persons who are booked into the jail in the first place (see Chapter IV for recommended approaches to reducing jail admissions).

Comparatively, survey data from the 1990 master plan show that in 1989, 68% of the intakes were released within two days.

**Duration of detention for persons released from Mecklenburg County Jail
July 1, 2005 – December 31, 2006**

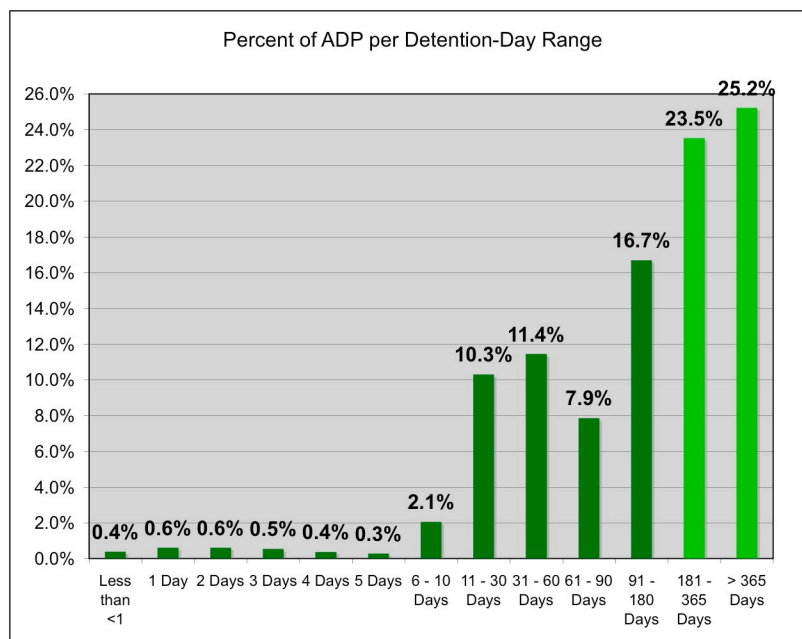
Duration of Detention	Number	Percent	Cumulative Percent
Less than <1	8,020	23%	23%
1 Day	6,404	18%	41%
2 Days	3,236	9%	50%
3 Days	1,866	5%	55%
4 Days	958	3%	58%
5 Days	596	2%	60%
6 - 10 Days	2,673	7%	67%
11 - 30 Days	5,185	15%	82%
31 - 60 Days	2,592	7%	89%
61 - 90 Days	1,075	3%	92%
91 - 180 Days	1,271	4%	96%
181 - 365 Days	889	2%	98%
> 365 Days	578	2%	100%
	35,343	100%	



One primary way to reduce jail population pressures is to reduce the number of persons booked into the jail. Obviously, such a reduction should not be made by refusing to take in persons who appear likely to flee the jurisdiction to avoid prosecution or who pose significant risks to public safety. However, there appears to be plenty of opportunity to reduce the volume of persons admitted to the jail who do not pose such risks. Even for those defendants whose jail stays are relatively brief, the initial costs of the booking process are significant. The resources of the jail should be focused on defendants who pose a clear risk to public safety and / or who are likely to flee the jurisdiction or fail to appear for court proceedings even if released under supervision.

To examine the impacts of inmates' length of stay on jail population, the consultants conducted a study of the proportion of the total ADP represented by inmates in different length-of-stay categories. The chart below shows that those people who stay for very short periods of time take up a very small proportion of the total bed space during their stay. For example, those with stays of 3 days or less accrue only 2% of the total inmate-days, and inmates with stays of 10 days or less only represent just 5% of the total inmate-days or ADP.

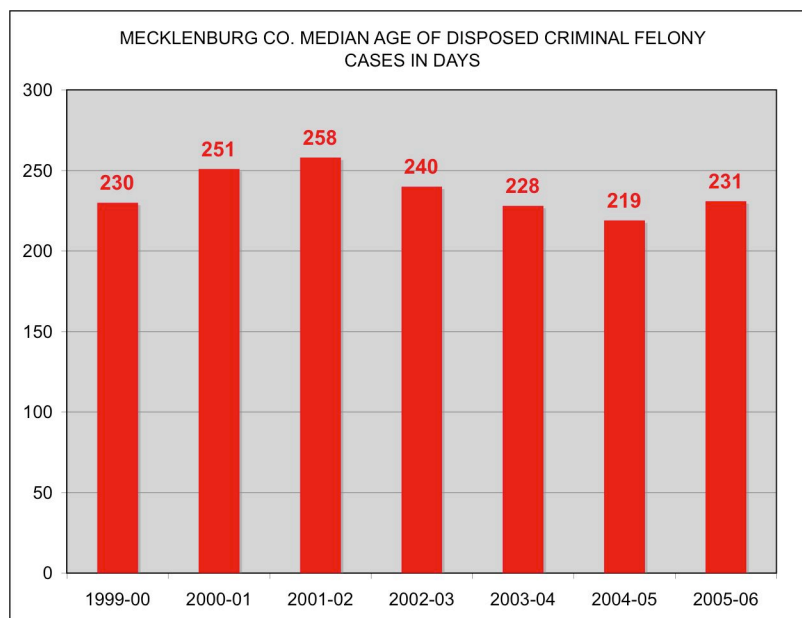
In contrast, nearly half of the detention days accrued at the facility (half of the average daily jail population) at any given time are people who stay longer than 180 days. One-quarter of the jail population on a typical day is comprised of people who have stays greater than one year. These figures underscore the significant contribution of lengthy stays in jail to jail population growth.



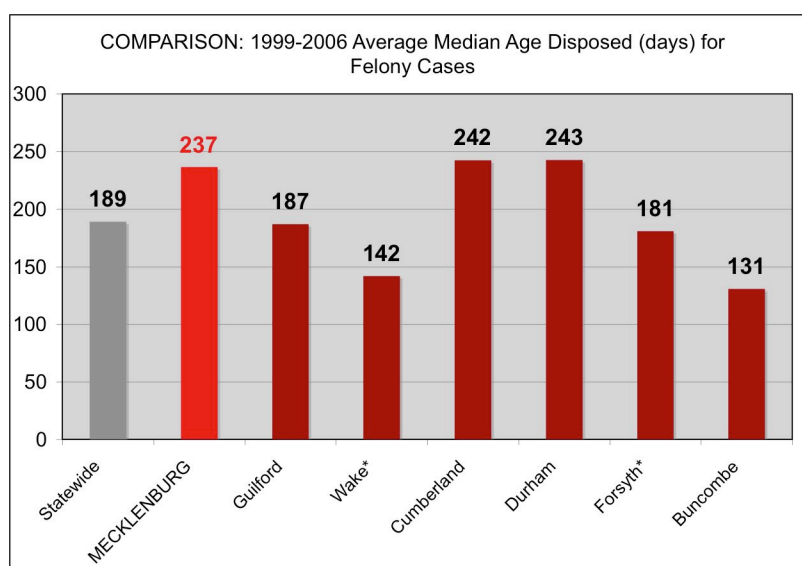
F. COURT DATA

The court system's collective capacity to process cases swiftly is an important factor in keeping the length of stay of pre-trial detainees to a minimum. In that the vast majority of the jail population in Mecklenburg County is awaiting trial / disposition and the majority of them are felons, the capacity of the Superior Court to process felony cases is a critical element in jail population management. The following charts and tables support the consultant team's observations regarding Superior Court processing of felony cases at the point when the team began working with Mecklenburg County.

Below is a chart that identifies the median disposition timeframe for felony cases filed in Mecklenburg County Superior Court. The data shows no sustained pattern of growth or decline between 1999 and 2006, with the median disposition time in 2005-06 being essentially the same as it was in 1999-00. The data comes from the North Carolina Court System Annual Superior Court Statistical Reports



The average of the median disposition timeframe of the last seven years in Mecklenburg County is at 237 days, measurably higher than the state wide average of 189 days over the same time period (+25%%). It is not the highest among other large counties in the state but is very close to the highs of 242 and 243 days recorded by Cumberland and Durham Counties. The average median timeframe for Mecklenburg is considerably higher than Guilford and Forsyth Counties and extremely high when compared to Wake and Buncombe Counties. The chart below expresses this data.





Mecklenburg County N.C. Detention-Corrections Master Plan

Based on the data available it would appear that one of the reasons that Wake County and Forsyth County has a much lower felony case disposition timeframe is that they dispose of many cases at the District Court level. That suggest a quick disposition and suggest that the cases never reach the Superior Court level. The table below looks at Mecklenburg County's peer counties and state-wide averages in this regard.

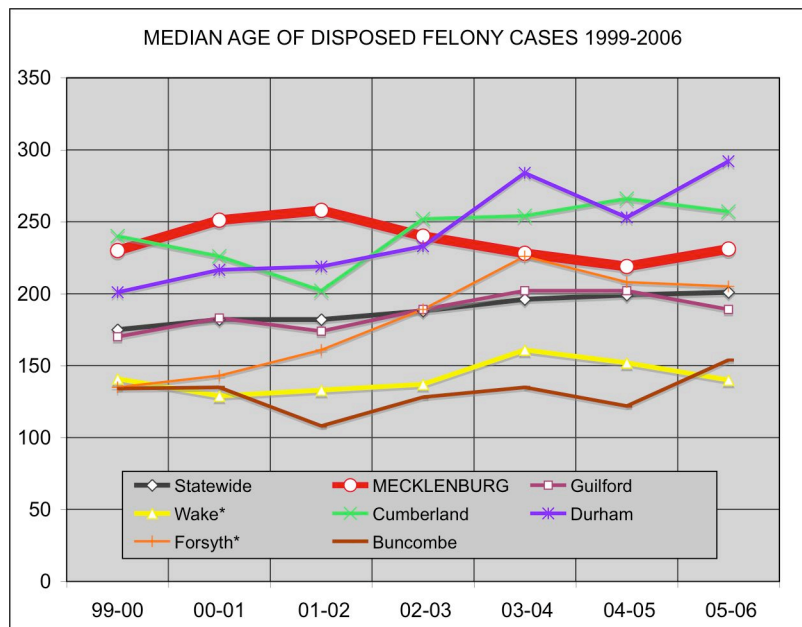
FELONY CASES DISPOSED IN DISTRICT COURT 1999-2006

	<i>Average FELONY Convictions in DISTRICT Court</i>	<i>Percent of Total Cases Disposed</i>
Statewide	2,628	2.6%
MECKLENBURG	11	0.1%
Guilford	11	0.1%
Wake	2,053	45.9%
Cumberland	3	0.1%
Durham	9	0.4%
Forsyth	1,396	82.3%
Buncombe	0	0.0%

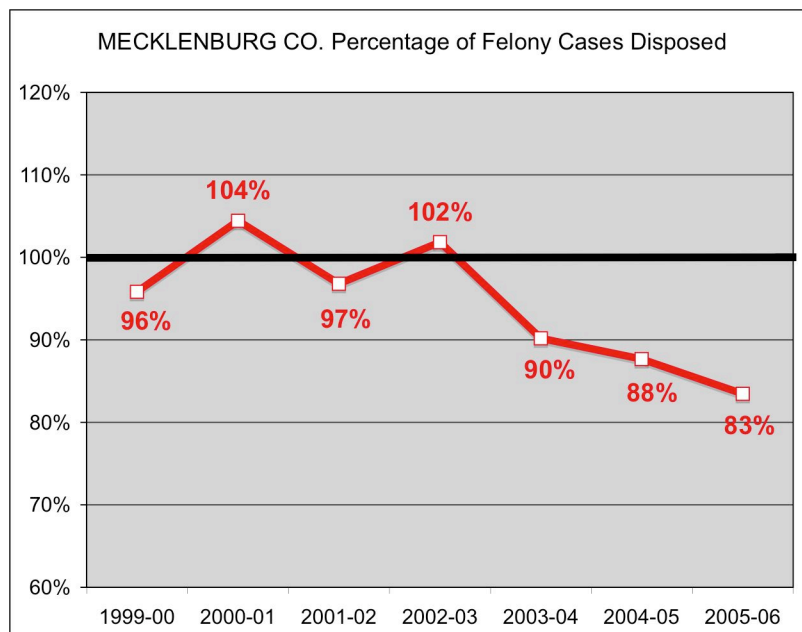
Below is a table which documents the median felony disposition timeframes for the state and each of the large North Carolina counties selected for comparison. Seven years of data is available. The state resources used as the source for this data has yet to post data for FY 2006-07 so 2005-06 is the latest data used. The table is followed by a graph which charts Mecklenburg County (in red) relative to those other jurisdictions. The chart more clearly shows that Mecklenburg's times are toward the high side but that it is trending downward while others are trending higher.

Average Median Age of Disposed Felony Cases (days)

	99-00	00-01	01-02	02-03	03-04	04-05	05-06	'99 to '06 Change
Statewide	175	182	182	188	196	199	201	15%
MECKLENBURG	230	251	258	240	228	219	231	0%
Guilford	170	183	174	189	202	202	189	11%
Wake*	141	129	133	137	161	152	140	-1%
Cumberland	240	226	202	252	254	266	257	7%
Durham	201	217	219	233	284	253	292	45%
Forsyth*	135	143	161	189	226	208	205	52%
Buncombe	134	135	108	128	135	122	154	15%

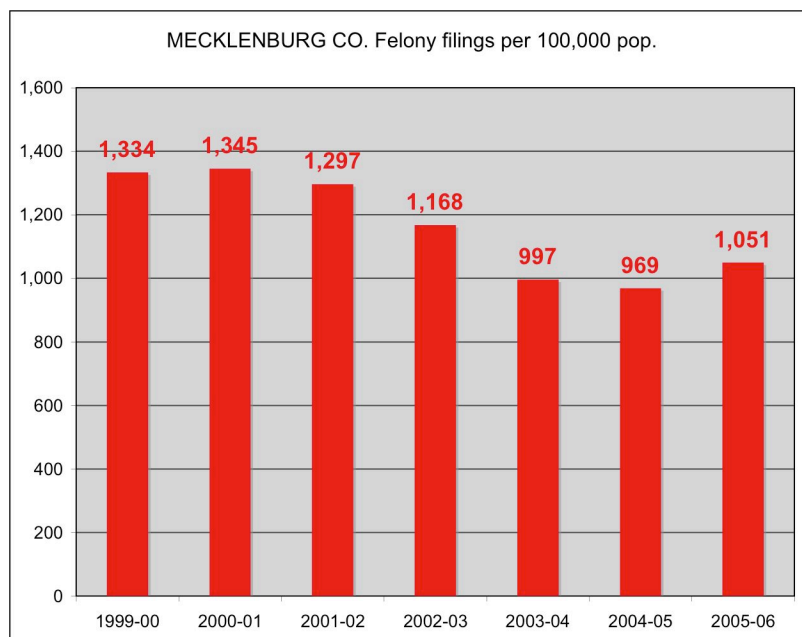


Being able to dispose of cases in a timely fashion is one issue, while another issue of case management is to dispose of at least as many cases as are filed in any given year. That is, the goal of all court systems is to have a 100% disposition rate in the course of a year. Mecklenburg County over the last seven years has seen its disposition rate go from the 100% range in the first 4 of the 7 years studied to falling well below 100%. In fiscal year 2005-06 the disposition rate was only 83%. As cases are not disposed, they tend to backup and take more time to clear. If these delayed cases involve detained inmates, their length-of-stay go up as does the overall average daily population.

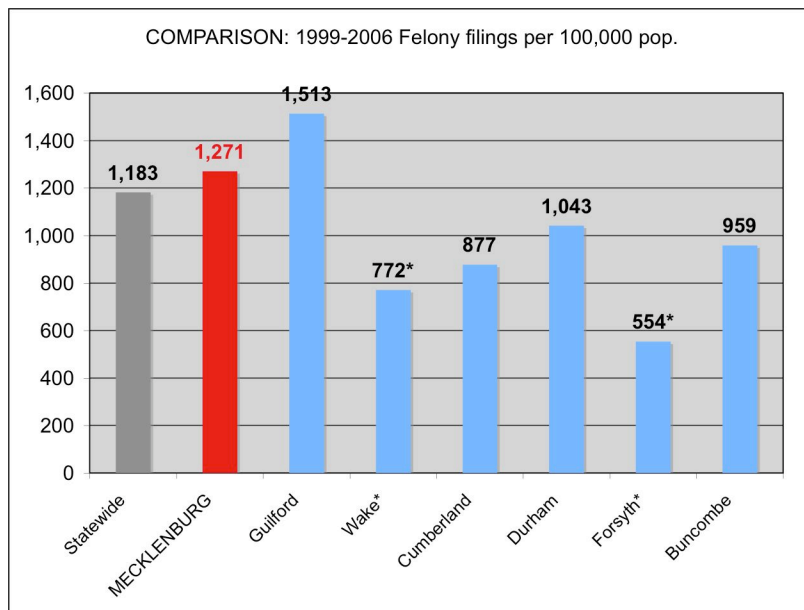




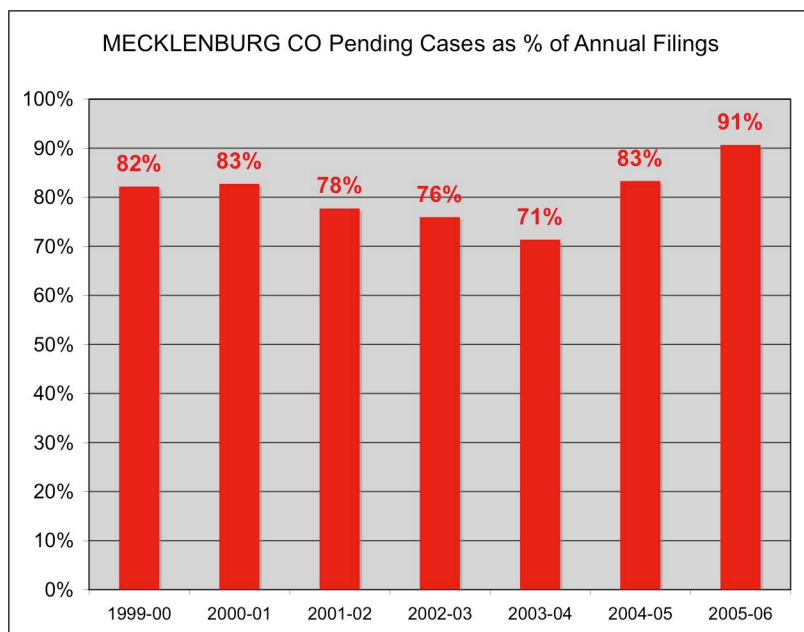
The felony case filing rate per capita in Mecklenburg County has been falling over the last 6 years. It has gone from a high of 1,345 cases filed per 100,000 population in 2000-01 down to 969 cases per 100,000 filed in 2004-05, a decline of 28%. The filing rate increased to 1,051 per 100,000 for an 8% increase in 2005-06. Yet the rate is still well below the rate filed several years early.



Mecklenburg County still files a relatively high number of felony cases per 100,000 when compared to state averages and its peer counties. As can be seen in the chart below Mecklenburg County over the last six years averaged 1,271 felony cases per 100,000 whereas the state-wide average is 1,183, or 7% less. Mecklenburg County is significantly higher, filing at a significantly higher rate over the last seven years compared to its peer counties with the noteworthy exception of Guilford County. Guilford County files a very high rate of felony cases per 100,000 population being 19% in excess of the Mecklenburg County rate.

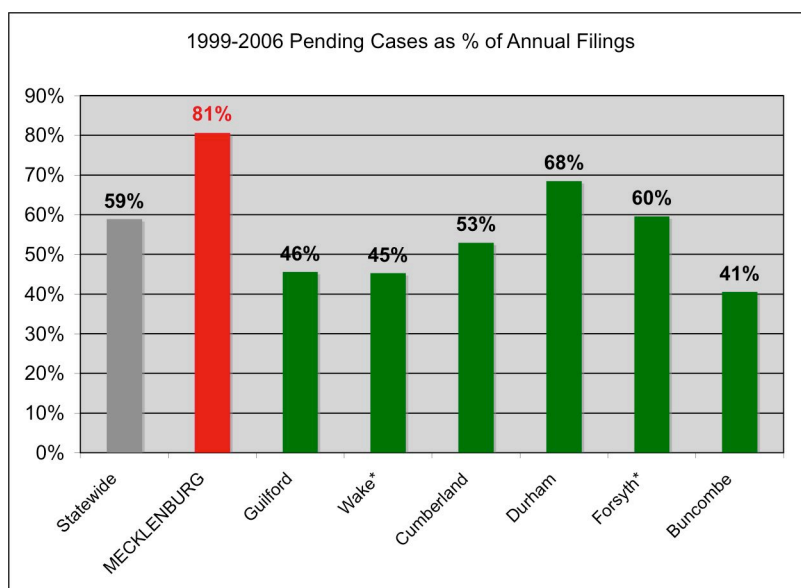


In the last 2 years pending cases as a percentage of annual filings has increased noticeably. It should be noted however, that the rate in 2005-06 was only slightly higher than that in 1999-00 and 2000-01. The chart below shows the percentages of pending cases compared to cases filed for Mecklenburg County over the last 7 years.

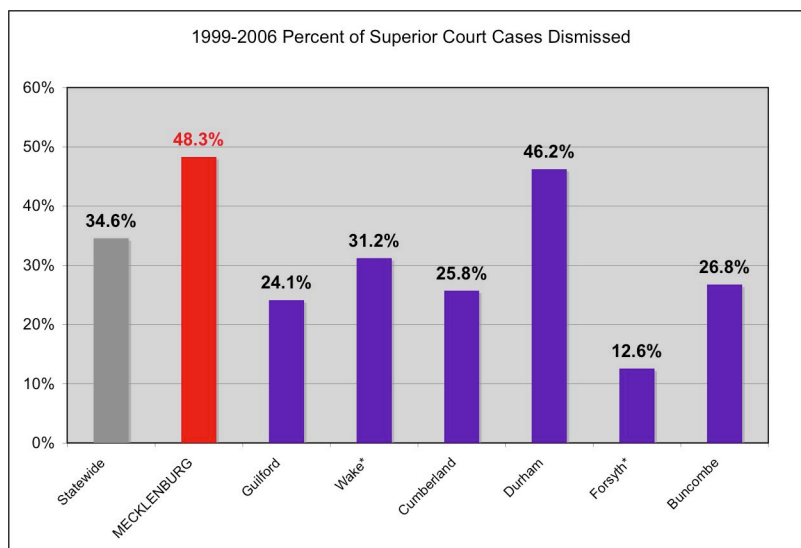




Mecklenburg County's percentage of pending cases compared to annual filings is the highest among its peer counties. It is considerably higher than the state-wide average. Even Guilford County, who files far more cases per capita than Mecklenburg, has a much lower rate of pending cases as a percentage of cases filed. The chart below illustrates these facts.



Compared to its peer jurisdictions and the state Mecklenburg County has over the last 7 years averaged a very high percentage of Superior Court felony cases whose disposition is dismissal. See the chart below.



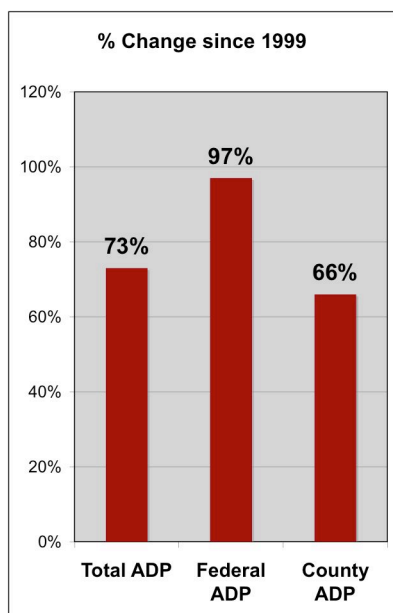


G. STATE CHARGED AND FEDERAL INMATES

Of the 2,671 inmates in the County's jail on an average day in 2007, three quarters were charged with state offenses, and the rest were being held for the federal marshal (20%) and/or ICE (5%). This percentage combined (25%) is more than twice the percentage found in 1989 (11.2%) during the consultant's earlier master plan effort.

The county has cooperative agreements with the federal government to house federal defendants awaiting court appearances, federal inmates in transit, and detainees of immigration officials. Many of the federal detainees are thought to be defendants who could have been charged with state offenses and thus could have been the county's responsibility anyway. The county receives significant per diems for housing detainees under federal jurisdiction.

Below is a table and chart that documents the rise in both state-charged and federal detainees. Since 1999, county (state-charged) detainees has risen 66%, and federal detainees have risen 97% with the most significant increases occurring in 2006 and 2007. Until then the cumulative rate of growth for federal inmates was the same as for county inmates. The overall detention-corrections population has risen 73% since 1999.



MECKLENBURG COUNTY, NC
ADP: FEDS-COUNTY

	TOTAL ADP	% change	Cum. % change since 1999	FED TOTAL	% change	Cum. % change since 1999	% of Total Population*	TOTAL minus FEDS	% change	Cum. % change since 1999
1990	956									
1991	1085	13%								
1992	1151	6%								
1993	1138	-1%								
1994	1167	2%								
1995	1266	9%								
1996	1400	11%								
1997	1468	5%								
1998	1525	4%								
1999	1542	1%		357			23%	1185		
2000	1751	14%	14%	330	-8%	-8%	19%	1421	20%	20%
2001	1850	6%	20%	442	34%	24%	24%	1408	-1%	19%
2002	1924	4%	25%	449	2%	26%	23%	1475	5%	25%
2003	1978	3%	28%	417	-7%	17%	21%	1561	6%	32%
2004	2039	3%	32%	425	2%	19%	21%	1614	3%	36%
2005	2180	7%	41%	489	15%	37%	22%	1691	5%	43%
2006	2484	14%	61%	611	25%	71%	25%	1873	11%	58%
2007	2671	8%	73%	704	15%	97%	26%	1967	5%	66%
2008										

*NOTE: In K&A's September 1989 snapshot FEDERAL prisoners were 11.2% of the total population.



H. SENTENCED POPULATION

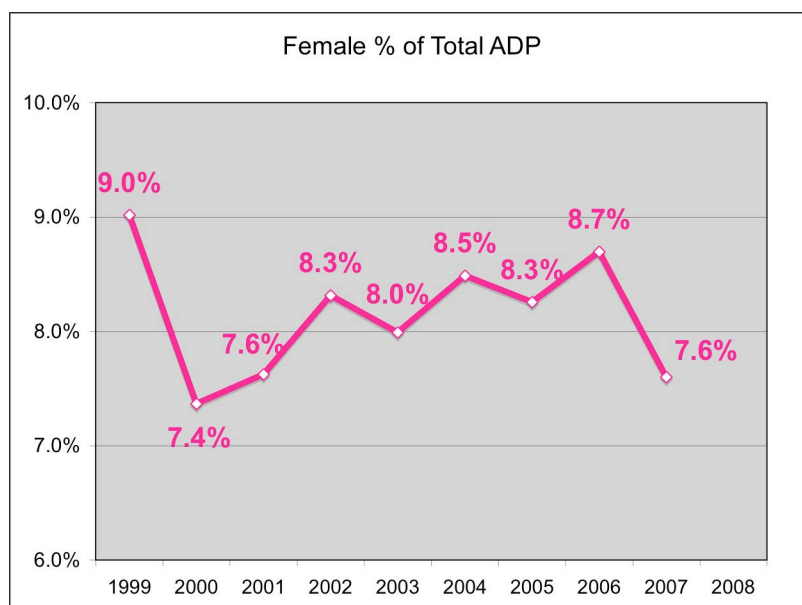
The sentenced population in Mecklenburg County during the 2006-07 fiscal year was 11.7% of the total ADP. This is considerably lower than the 25.2% found in the master plan snapshot of September 1989. The reduction is largely a function of a law change which reduced the responsibility of counties for sentenced populations and increased that of the state.

If work releasees at the WRRC are removed from the sentenced population the sentenced proportion of the secure ADP at North and Central is only 8.3%. This makes the North and Central facilities predominantly pretrial facilities. In FY 2006-07 8.3% translated into only 220 ADP or slightly more than one-third of the North facility's capacity. North was intended as a sentenced facility.

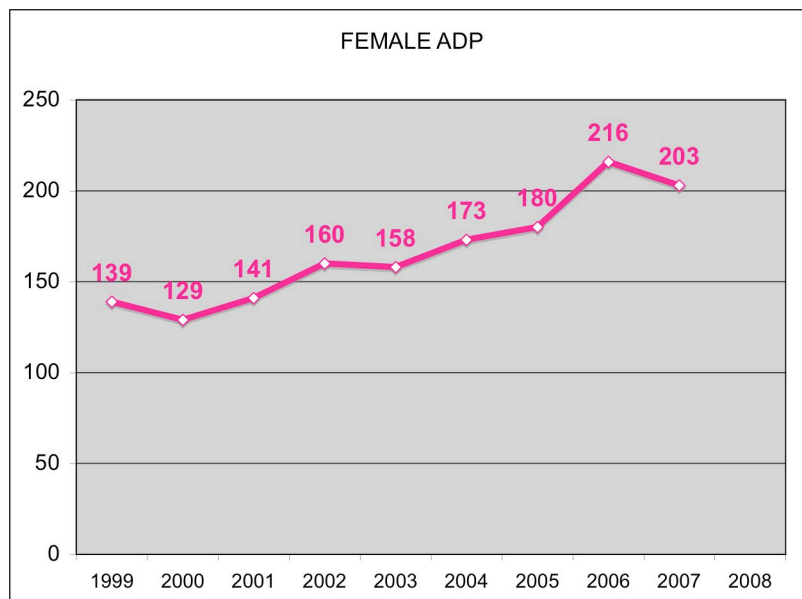
I. FEMALE POPULATION

The female population in Mecklenburg County is relatively modest compared to national averages. Its female population has remained relatively steady since 1999 hovering between 7.5% and 9.0%. It does not appear to be growing in proportion. Indeed, in a September 1989 snapshot of the jail population developed by the consultants during the 1990 master planning process the female population equaled 9.3%.

In 1995 the national rate was 10.1%, and in 2007 it had risen to 12.7%, and has been showing a consistent pattern of growth.



The chart below records the actual annual female population within the system. The high of 216 in 2006 represents about 10.5% of the combined Central and WRRC capacities, which is where they are housed, and only 8% of the total three facility capacity.



J. JAIL POPULATION PROJECTIONS

The consultants developed a jail population projection methodology that takes into account the growth rates of the county population and the jail population. The consultant team utilized the higher projections produced by the Chamber of Commerce rather than the U.S. Census Bureau projections, since historically the Chamber's projections have proven to be more accurate. In addition, using higher numbers produces a projection less likely to be eclipsed by a rapidly rising jail population and thus less likely to result in early overcrowding of additional jail capacity.

The projections developed through 2030 appear in the table below. The projected average daily population is also multiplied in one column by a factor intended to account for peaks in populations and the need for surplus beds to insure that the county's inmate classification system can be successfully implemented. The peak factor is gradually reduced over time because the consultant's experience is that peak factors lessen as populations get larger. That is, larger facilities are better able to absorb the population peaks that actually occur.

The projections for the pivotal years 2020 and 2030 are highlighted. Also highlighted adjacent to those population and bed capacity projections is the shortfall that results from the projection once the projected bed capacity numbers are compared against the 2,776 permanent beds available once the Youthful Offender (YO) addition at the North campus opens.

Given the rapid growth of both county population and jail population in the past it is projected that by 2020 Mecklenburg will need 5,111 beds representing a 2,335 bed shortfall. That is 85% more beds than will be available once the YO addition is completed. By 2030, Mecklenburg County will need 7,287 beds, representing a 4,511 bed shortfall, 162% more than will be available with the YO expansion.



These are what are referred to in this report as "base" projections for Mecklenburg County. These projections simply extend historical trend lines and take into consideration general population growth. Base projections incorporate no assumptions about changes in the way the County's criminal justice system operates, forecasting jail bed space that will be needed in the future unless something is done to mitigate the significant rate of jail population increase on which these projections are based.

The following table summarizes projected detention-corrections ADP assuming no changes to the practices and procedures of the local criminal justice system. The table shows Base bed space needs (taking into account peaking and classification factors), and projected shortfalls (based on a current detention-corrections system capacity of 2,776 beds).

Modified ADP and Bed Needs Projections

Year	2020	2030
ADP	4,543	6,625
Bed Need	5,111	7,287
Shortfall	2,335	4,511
Shortfall as percent of Current Capacity (2,776)	84.1%	162.5%

The table below provides more detail regarding county population history and growth, ADP history and growth, and peak factors leading to projected bed capacity.



Mecklenburg County N.C. Detention-Corrections Master Plan

BASE JAIL POPULATION PROJECTIONS - No System Change Modifications MECKLENBURG CO, NC

3/21/08

BASE

MECKLEN- BURG COUNTY POPULATION per U.S. Census Bureau	Year	MECKLEN- BURG COUNTY POPULATION per higher Chamber Estimates	% Annual Change in County Population	Average Annual Jail Population & Projections- State Charged & Fed Inmates 1990-06 CY ADP data	PROJECTED BASE BED NEEDS (w/ Peak & Classification Factor applied)	BED SHORTFALL between BASE projections and existing beds	% Annual Change in Average Jail Population	Peak & Classification Factor (multiplied by ADP to get Beds)
511,433	1990			956			-	
529,835	1991			1,085			13.5%	
548,237	1992			1,151			6.1%	
566,639	1993			1,138			-1.1%	
585,041	1994			1,167			2.5%	
603,443	1995			1,266			8.5%	
621,845	1996			1,400			10.6%	
640,247	1997			1,468			4.9%	
658,649	1998			1,525			3.9%	
677,051	1999			1,542			1.1%	
695,370	2000			1,751			13.6%	
	2001	720,490	3.6%	1,850			5.7%	
	2002	746,427	3.6%	1,924			4.0%	
	2003	770,299	3.2%	1,978			2.8%	
	2004	790,809	2.7%	2,039			3.1%	
	2005	820,635	3.8%	2,180			6.9%	
	2006	850,178	3.6%	2,484			13.9%	
	2007	871,432	2.5%	2,671	2,938		7.5%	
	2008	902,803	3.6%	2,569	2,954		-3.8%	1.150*
	2009	935,304	3.6%	2,705	3,111		5.3%	1.150
892,458	2010	968,975	3.6%	2,845	3,272		5.2%	1.150
28.3% growth from 2000	2011	1,003,858	3.6%	2,991	3,432		5.1%	1.148
	2012	1,039,997	3.6%	3,142	3,598		5.0%	1.145
	2013	1,077,437	3.6%	3,299	3,769		5.0%	1.143
	2014	1,116,225	3.6%	3,461	3,946		4.9%	1.140
	2015	1,156,409	3.6%	3,629	4,128		4.9%	1.138
	2016	1,198,039	3.6%	3,803	4,316		4.8%	1.135
	2017			3,982	4,509		4.7%	1.133
	2018			4,164	4,706		4.6%	1.130
	2019			4,352	4,906		4.5%	1.128
1,107,790	2020			4,543	5,111	2,335	4.4%	1.125
59.3% growth from 2000	2021			4,738	BED NEED	SHORTFALL	4.3%	1.123
	2022			4,937	5,529		4.2%	1.120
	2023			5,139	5,743		4.1%	1.118
	2024			5,344	5,959		4.0%	1.115
	2025			5,552	6,177		3.9%	1.113
	2026			5,763	6,397		3.8%	1.110
	2027	1,600,000		5,976	6,618		3.7%	1.108
	2028	130.1% growth from 2000		6,191	6,841		3.6%	1.105
	2029			6,407	7,064		3.5%	1.103
1,335,062	2030			6,625	7,287	4,511	3.4%	1.100
92.0% growth from 2000		84%		278.3% growth from 2000	BED NEED	SHORTFALL		

* 1.15 factor derived from current overcrowding levels evidenced by 304 ADP more in direct pods than capacity, peaks of 360.

This overcrowding is due to classification concerns and suggests an immediate need for 400 more beds, which is 15% above capacity.

KIMME & Associates/Law & Policy Associates



K. PROJECTION OF INTAKES

Based on the historical changes in intakes, particularly as represented by the most recent seven years, the consultants provide the following projections of intakes at the jail. These projections are important because they directly affect needs related to a series of components at the detention-correction facilities including the following:

- Vehicle Sally Port
- Arrest Processing Center
- Magistrate Area
- Pre-trial Services
- Intake
- Property Storage
- Sobriety Testing
- Classification

Based on the more modest growth rates in intakes, the projected rate of increase in intakes is not near as aggressive as jail population projections. By extension this means that the ADP projections which preceded envision continuing increases in the average length-of-stay of inmates booked at the detention-corrections facilities. Total intakes in 2007 were 43,994.

PROJECTED INTAKES

	AVERAGE	PEAK
2012	49,142	56,514
2013	50,206	57,737
2014	51,293	58,987
2015	52,404	60,264
2016	53,538	61,569
2017	54,697	62,902
2018	55,881	64,263
2019	57,091	65,655
2020	58,327	67,076
2021	59,590	68,528
2022	60,880	70,012
2023	62,198	71,528
2024	63,544	73,076
2025	64,920	74,658
2026	66,326	76,274
2027	67,761	77,926
2028	69,228	79,613
2029	70,727	81,336
2030	72,258	83,097



III. PROJECTED FACILITY NEEDS AND COSTS – BASE ESTIMATE

A. INTRODUCTION

In this chapter the consultants describe the long-term bed capacity and space needs of the county jail system based on the inmate population and bed capacity projections developed in the previous chapter. The consultants also prepare an initial estimate of the ballpark costs of constructing and operating expanded Mecklenburg County facilities. All of these estimates are derived from the base projections of capacity, thus assuming no changes in local criminal justice system practices that would reduce, or modify, the projected average daily population trend line. In doing this work, the consultants' intent is to establish a baseline against which the savings produced as a result of system changes can be measured. In other words, it is the county's and the consultants' hope that the bed capacity, space needs and costs associated with the estimates in this chapter will not come to pass because changes will be made that render these estimates irrelevant. Nonetheless, it is critical to the process to establish these baselines for measurement purposes.

The estimate of space needs that drives the construction costs has to be considered a "scope" estimate. At this stage in the facility development process, neither the consultants nor the client are prepared to enter into the space programming stage of the process. Such a process is quite detailed and deliberate and is predicated on a facility option having been chosen. Its result is a detailed room-by-room list of spaces, their quantity, and their specific net square footages. Further, the program is organized by specific components with each component being assigned a specific gross factor to account for corridors, walls, stairways, mechanical chases, and so forth all of which are added to net usable square footage. Further, a program produces detailed relationship diagrams and detailed information about the spaces which in the end facilitates the effective design of the future facilities by an architect. It also facilitates a detailed review of the architect's plans by the user since they have before them detailed measurements by which a design can be judged.

However, while the mission was not to produce a program, the consultants did not want to merely assign an average square footage per bed to the projected capacity in order to estimate space needs and costs. Such a basic figure would be relatively uninformed and far less useful. Thus, the consultants, with significant participation from the sheriff's planning team, endeavored to "split the difference" by developing information more detailed than a simple square foot per bed estimate but less than a detailed program needed for design. The hope was that a better initial estimate of space and costs so that there would be more reliable option development and budget setting.

Additionally, the work done would provide critical foundation work for the programming.



B. METHODOLOGY

The method used for estimating scope space needs and costs was as follows:

1. Analyze the inmate population history breakdown in terms of classifications (maximum, medium, disciplinary, special needs, medical, work release, etc.).
2. Identify the future probable breakdown of inmate population per inmate classifications.
3. Identify the types of housing pod appropriate to each classification.
4. Calculate the number of each pod type needed.
5. Estimate the square footage of each pod type as a.) derived from similar pods in Mecklenburg County, b.) modified per staff requests, and/or c.) taken from pod types previously programmed and designed by K&A for other projects.
6. Identify the adequacy or inadequacy of non-housing support space in all facilities.
7. Estimate the additional space needed in today's terms to rectify existing support space deficiencies.
8. Develop an adjusted square foot per bed figure for both non-housing support areas and overall gross square footage. Do so by calculating total non-housing pod square footage and all gross area, and adding space for the support space shortages identified.
9. Estimate a future sq.ft./bed figure for gross area and support space expansion recognizing that some amount of basic infrastructure in the existing sq.ft./bed allocation need not be repeated.
10. Apply the support square foot per bed estimate to the projected bed capacity served, and then add the housing pod square footages to obtain a total square footage.
11. Identify a reasonable square foot cost for today and the future based on data from the county, other sources and through recognizing differences in fundamental pod design approach and costs (essentially dry cell pods should cost less than wet cell pods in a similar situation).

Insofar as staffing and operational costs are concerned, the consultants also tried to follow an approach that was more detailed than simply a pro-rated cost based on additional inmate population. While the consultants were not in the position to do a post-by-post estimate of staffing without a program or a design they still wanted to undertake a process that would result in a better estimate of costs than derived from only pro-rating. Thus, staff and operational cost estimates also were the product of a more detailed process per the outline below:



1. Identify precisely the housing pod types needed and the pattern of staffing for those housing pods.
2. Identify the staff and operational budgets for various components and estimate their growth as a ratio to either projected average daily population increases or projected intake processing increases, as appropriate.
3. Identify historic utility costs and extrapolate them to the more detailed scope estimate of new square footage to be provided.

These processes are also followed later in Chapter V regarding the modified estimate of space and operational needs and costs resulting from system changes described in Chapter IV. These changes are projected to significantly reduce the base projected jail population.

C. DELINEATION OF FUTURE HOUSING NEEDS

Variations in housing pod design can make a significant difference in projected costs. The nature of housing pods can also have a significant impact on the number and type of staff required to safely and securely supervise and serve the housing areas. Though the intent here is not to create a detail space program, developing a basic understanding of the kinds of inmates the detention system holds and how they are best managed is crucial to estimating both general housing space needs and likely staff costs in a more accurate way.

1. Inmate Classification

The first step in determining the size and nature of housing areas is to identify the different types of inmate classifications which exist and for which there should be separate housing units or pods.* Below is a list of the inmate classifications used and preferred by Mecklenburg County. This list is derived from current practice and modified for future use. It applies to both male and female inmates.

The list reflects the fact that not all inmates are alike nor can they be treated alike. They behave differently with some posing threats to others, while some are compliant. There are those with mental health problems, and there are those with medical conditions up to and including carrying contagious diseases. Some inmates break the rules and must be separated from the others for disciplinary action. Others come and go from the facility on a daily basis (Work Releasees) and thus present contraband passage challenges that are best managed by keeping them separated from the rest of the confined population.

The inmate classifications used by Mecklenburg County are identified in the table below.

* A "pod" is generally defined as an entire housing area complete with sleeping areas, dayrooms, showers, and whatever support space is provided within the housing area. A "unit" is generally a sub-division within a pod. Direct Supervision pods are not sub-divided into multiple units.



Classifications Selected:

Mecklenburg County

1	Classification-Orientation
2	Classification-Federal
3	Inmate Workers
4	Maximum (1 & 2)
5	Medium-Minimum (3-8)
6	Minimum
7	Protective Custody (PC)
8	Disciplinary Detention (DDU-ADU)
9	Negative Pressure
10	Medical Maximum
11	Medical Infirmary
12	Medical Minimum-Medium
13	Persistent Mental Illness (PMI)
14	Suicidal (level 2)-Special Mental Health
15	Step Down
16	Substance Abuse
17	Weekenders
18	Youthful Offenders (YO)
19	YO Disciplinary
20	YO Maximum
21	YO Protective Custody
22	YO Medical-Mental Health
23	YO Classification-Orientation
24	Vocational
25	Work Release

2. Classifications as Distributed Across the Current Population and Housing Characteristics

The next step in the process is to estimate the percentages of the population that fit into the classification categories. The place to begin is with the current population since that is the easiest to identify. Toward that end the consultant developed a sample of the current population. The sample was taken from 38 days of 0600 hour inmate counts (from the jail's cell count form) as distributed across different classifications/housing units. The data was sampled from the July 1, 2006 to July 11, 2007 timeframe (376 days). Thus, the sample was of 10% of the days from that time period. A proportionate number of days was chosen from each month with the day of the week varied. There were five days each for Monday through Thursday and six days each for Friday through Sunday.

The following table shows the results of the sample relative to the different inmate classifications within the jail. Of note, it shows that a total of 68.5% of the inmate population falls into the general population categories of medium and minimum security. The



Mecklenburg County N.C. Detention-Corrections Master Plan

remaining 31.5% fall into special classifications involving high security risks, behavioral problems, youthful offenders, medical health conditions, mental health conditions and weekenders.

CELL COUNT/CLASSIFICATION DATA SAMPLE

WRRC FACILITY:

PRIME GROUPS:

Average
Daily
Population

SUB-GROUPS:

Average
Daily
Population

Classification:

88.4	3.4%	10.6	0.4%	Work release Females
		77.8	3.0%	Work release Males

NORTH & CENTRAL:

PRIME GROUPS:

Average
Daily
Population

SUB-GROUPS:

Average
Daily
Population

Classification:

186.4	7.1%	116.4	4.4%	Classification Orientation
		24.9	0.9%	Classification, Medium Female
		45.2	1.7%	Classification- FEDERAL
64.6	2.5%	38.6	1.5%	DDU
		15.7	0.6%	DDU Adult
		7.3	0.3%	DDU Female
		3.0	0.1%	DDU/PO Female
145.1	5.5%	13.6	0.5%	Inmate Worker (trustee)
		0.6	0.0%	Inmate Worker-Inside Maint
		79.9	3.0%	Inmate Workers
		49.6	1.7%	Inmate workers-Kitchen
		1.4	0.1%	Inmate Worker-Weekender
84.8	3.2%	10.6	0.4%	Maximum
		51.1	1.9%	Maximum 1-Close Custody
		22.8	0.9%	Maximum 2 High Custody
		0.2	0.0%	Maximum Female
73.4	2.8%	19.4	0.7%	Medical
		0.9	0.0%	Medical Infirmary - Female
		6.5	0.2%	Medical Infirmary - Male
		9.0	0.3%	Medical Maximum
		37.6	1.4%	Medical Minimum/Medium
1318.2	50.2%	361.4	13.8%	Medium
		796.1	30.3%	Medium 3, 4
		80.6	3.1%	Medium 3/4/5A
		80.0	3.0%	Medium 4
427.9	16.3%	48.0	1.8%	Min./Inmate Workers Female
		105.1	4.0%	Minimum/Medium Female
		274.8	10.5%	Minimum
17.2	0.7%	0.1	0.0%	PC Female
		12.5	0.5%	PCU
		3.7	0.1%	Protective Custody
		1.1	0.0%	Protective Custody-Keep Separate
19.7	0.7%	8.8	0.3%	Step Down
		10.9	0.4%	Step Down-ADU Refusal to Work
84.1	3.2%	34.6	1.3%	Substance Abuse
		49.5	1.9%	Substance Abuse Treatment Medium 3, 4
23.7	0.9%			Weekender
94.7	3.6%	4.9	0.2%	Youth Offender, Female
		10.1	0.4%	Youthful Offender DDU
		5.1	0.2%	Youthful Offender Max
		3.6	0.1%	Youthful Offender PC
		71.0	2.7%	Youthful Offenders



Another looks at classifications as they compare to the 38 day sample appears below. This compares classification data as recorded in the county's computerized classification system and taken from a sample of jail releasees, and the breakdown of similar categories per the sample. As can be seen the numbers compare favorably and help validate the utility of the 38 day sample. For reference classification categories 1 and 2 in the table below are considered "maximum".

JAIL RELEASES from 3/1/07 - 5/31/07

Custody Level	% of Beds by Initial Custody Level before Overrides		% of Beds by Initial Custody Level after Overrides		K&A sample from Cell Counts
1 High	0.5%		0.3%		
2 Close	4.2%	4.7%	3.5%	3.8%	5%
3 High-Medium	26.3%		25.3%		
4 Medium	33.5%		38.1%		
5a Medium-Pretrial	2.5%	62.3%	4.0%	67.4%	71%
5b Minimum-Pretrial	25.5%		25.8%		
6 Minimum	0.2%		0.1%		
7 Low Minimum	1.0%		1.0%		
8 Very Low Minimum	6.4%	33.1%	2.0%	28.9%	24%
	100.1%		100.1%		

In the 1989 snapshot done by the consultants for the 1990 master plan, and based on the classification system and antiquated linear facilities of that time, the classifications distributed as 25.0% maximum, 41.3% medium, and 33.7% minimum. While the minimum classification is about the same, the maximum classification was certainly perceived to be far higher than today.

3. Housing Worksheets

Housing Worksheets that assign percentages among male and female inmate classifications to different housing pods with varying characteristics were developed with the Sheriff's Planning team based on the previously reviewed classification data. The reader will note that the worksheets appearing later not only document the estimated percentage of inmates that fall into each category but what the percentages represent in terms of the current average daily population. Additionally, high counts for the various classifications are estimated so that proper peaking factors can be applied to insure that there are sufficient beds for each classification category.

It is important to note that classification percentages represented in worksheets for future years were adjusted per changes in population make-up identified and forecast by jail staff.

The worksheets also identify the appropriate supervision/ surveillance approach for each inmate classification. Therefore, the worksheets document whether inmates are best managed under direct supervision, podular remote surveillance, or intermittent monitoring methods. The graphic below describes the three principle types of surveillance that were under review.



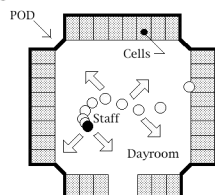
INMATE SURVEILLANCE & SUPERVISION METHODS

The 3 Primary Housing Area Approaches

• CONSTANT 24 HR./DAY STAFF PRESENCE

1 DIRECT SUPERVISION

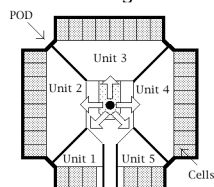
- Also called "Podular Direct"; inexpensive.
- Officer moves freely in Pod with inmates; i.e., no barriers separate them from each other.
- Interaction with inmates is great.
- Reliance on perimeter security high, internal physical security low.
- Best suited to Medium & Low security, though used with High.



WALWORTH COUNTY, WI. Jail

2 INDIRECT SURVEILLANCE

- Also called "Podular Remote".
- Officer observes inmates from behind a security (glass) barrier.
- Interaction with inmates limited.
- Reliance on physical security moderately high.
- Good, complete views essential.
- Best suited to High and Medium Security.

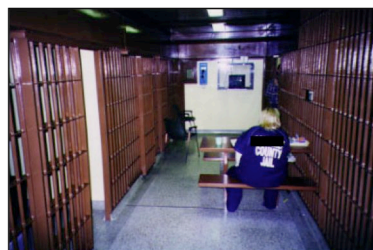
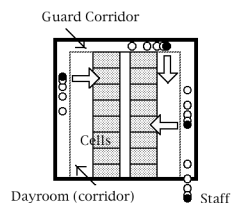


WILL COUNTY Adult Detention Facility:
Housing Unit to the left, Control to the
Right

• INTERMITTENT STAFF PRESENCE

3 INTERMITTENT SURVEILLANCE

- Typical method in older jails for all security levels.
- Officer periodically goes up to or around housing area to briefly observe inmates.
- Inmates are expected to manage themselves between intermittent staff contacts ("rounds").
- Reliance on physical security very high given lack of staff presence.
- Risk of assaults & vandalism higher.
- Best suited to Low Security.



Dayroom with
Cells on Left,
Guard Corridor to
right



Guard Corridor
with Cellblock on
the right



The worksheets also identify whether the inmates must, or can, be housed in single occupancy cells, double occupancy cells, dormitories, or some other occupancy configuration. Determinations about the maximum desirable density of a pod -- that is how many inmates of that category can either be in a entire housing pod or a unit within a housing pod -- are documented.

The determinations recorded on the worksheets should be re-visited, confirmed and/or revised during detail pre-design programming.

a. Classification Housing Worksheets for the Year 2020 – Base Needs

The year 2020 and the base projected capacity needs related thereto was selected as an appropriate benchmark for the first phase of any construction project. It was chosen in part because of the very high rate of growth projected for the jail population. In that the consultant team is uncertain that growth rates will continue at such a rapid pace, it seemed prudent to break the response to year 2030 needs into two phases.

Year 2020 was also chosen because it would allow a minimum timeframe during which to operate new facilities before new construction or additions would have to be contemplated based on the bed capacity projections developed. Even though 2020 is actually 12 years away, the consultants have allowed for the fact that it would probably take 3 to 4 years to secure sites, develop a valid pre-design space program, and then design and construct future facilities. Thus, even if the county began today new facilities would not open until late 2011 or early 2012 at best (see the preliminary schedules elsewhere in this report). The operational window between then and 2020 is only about eight years.

Two sets of year 2020 housing worksheets follow. The first set applies to the male population and the second to the female population. The numbers are for the entire system, regardless of facility.



Mecklenburg County N.C. Detention-Corrections Master Plan

HOUSING WORKSHEET #2a

2020

BASE Classifications/Distribution based on Future ADP, *no system change assumptions*
Mecklenburg County

7/19/07

BASE

Future ADP = **4,543** **5,111 beds** **1.125 P.F.**
Male = 92.1% **4,184.1**
Female = 7.9% **358.9**

CLASSIFICATION - SEPARATION GROUPS	Current %	2020 AVG.%	AVG	High	CURRENT PEAK FACTOR	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	OCCUPANCY TYPE (single, double, dorm)
MALE ADP:								
Classification-Orientation		4.5%	205.8	298	1.45	DIRECT	56	Single, wet
Classification-Fed		1.6%	71.8	98	1.36	DIRECT	48	Single, wet
Disc Detention (DDU-ADU)		7.0%	318.0	375	1.18	Pod Remote	12/36	Single, wet
Inmate Workers		5.7%	258.0	295	1.14	DIRECT-Pod Remote Hybrid	56	Single, DRY
Maximum (1 & 2)		3.0%	136.3	146	1.07	Pod Remote	16/48	Single, wet
Negative Pressure		0.1%	2.3	5	2.00	DIRECT		Single, wet
Medical Max		0.3%	15.0	22	1.45	Pod Remote		DORM
Medical Infirmary		0.3%	12.7	17	1.32	DIRECT	12	Single, wet
Persistent Mental Illness (PMI)		0.5%	22.7	28	1.23	Pod Remote		Single, wet
Suicidal (level 2)-Spcl Mental Health		0.2%	8.6	12	1.36	DIRECT	28	Single, wet
Medical Min-Med		1.5%	68.1	80	1.18	DIRECT	56	Single, wet
Medium-Minimum (3-8)		40.8%	1853.1	1936	1.05	DIRECT	64	Single DRY
Protective Custody (PC)		0.6%	26.3	37	1.40	Pod Remote		Single, wet
Minimum		10.0%	454.3	520	1.14	DIRECT	40	Dorm
Step Down		0.7%	33.6	44	1.31	Pod Remote	16	Single, wet
Substance Abuse		6.0%	273.3	295	1.08	DIRECT	52	Single DRY
Weekenders		1.0%	45.9	128	2.80	DIRECT	50	Dorm
Youthful Offenders (YO)		2.4%	107.2	117	1.09	DIRECT	12	Single, wet
YO Disc		0.4%	15.9	27	1.68	DIRECT	12	Single, wet
YO Max		0.2%	9.1	15	1.65	DIRECT	12	Single, wet
YO Prot. Custody		0.1%	5.5	10	1.81	DIRECT	12	Single, wet
YO Med-Ment		0.2%	9.1	12	1.36	DIRECT	12	Single, wet
YO Classification- Orientation		0.2%	9.1	12	1.36	DIRECT	12	Single, wet
VOCATIONAL		2.0%	90.9	103	1.14	DIRECT	40	Dorm
Work Release		2.9%	129.9	145	1.12	DIRECT	60	Single DRY
Male Total =		92.1%	4,182.5	4,778				

CLASSIFICATION - SEPARATION GROUPS	Low	2020 AVG.%	AVG	High	PEAK FACTOR	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	OCCUPANCY TYPE (single, double, dorm)
FEMALE ADP:								
Classification-Orientation		0.9%	42.7	66	1.54	DIRECT	56	Single, wet
Classification-Fed						DIRECT	48	Single, wet
Disc Detention (DDU-ADU)		0.5%	22.7	32	1.39	Pod Remote	12/36	Single, wet
Inmate Workers		1.0%	45.4	54	1.18	DIRECT-Pod Remote Hybrid	56	Single, DRY
Maximum (1 & 2)						Pod Remote	16/48	Single, wet
Negative Pressure						DIRECT		Single, wet
Medical Max						Pod Remote		DORM
Medical Infirmary		0.06%	2.7	5	1.90	DIRECT	12	Single, wet
Persistent Mental Illness (PMI)						Pod Remote		Single, wet
Suicidal (level 2)-Spcl Mental Health		0.1%	5.0	7	1.45	DIRECT	28	Single, wet
Medical Min-Med						DIRECT	56	Single, wet
Medium-Minimum (3-8)		3.0%	136.7	161	1.18	DIRECT	64	Single DRY
Protective Custody (PC)						Pod Remote		Single, wet
Minimum						DIRECT	40	Dorm
Step Down						Pod Remote	16	Single, wet
Substance Abuse		1.5%	68.1	80	1.18	DIRECT	52	Single DRY
Weekenders						DIRECT	50	Dorm
Youthful Offenders (YO)		0.2%	9.1	17	1.90	DIRECT	12	Single, wet
YO Disc						DIRECT	12	Single, wet
YO Max						DIRECT	12	Single, wet
YO Prot. Custody						DIRECT	12	Single, wet
YO Med-Ment						DIRECT	12	Single, wet
YO Classification- Orientation						DIRECT	12	Single, wet
VOCATIONAL						DIRECT	40	Dorm
Work Release		0.5%	22.7	31	1.36	DIRECT	60	Single DRY
Female Total =		7.8%	355.3	453				

© KIMME & Associates, Inc.



Mecklenburg County N.C. Detention-Corrections Master Plan

b. Classification Housing Worksheets for the Year 2030 - Base Needs

Housing worksheets for the year 2030 follow.

HOUSING WORKSHEET #2b

2030

BASE Classifications/Distribution based on Future ADP, *no system change assumptions*
Mecklenburg County

7/19/07

BASE

Future ADP = 6,625 7,288 beds 1.10 P.F.
Male = 92.1% 6,102
Female = 7.9% 523.4

CLASSIFICATION - SEPARATION GROUPS	Low	#REF! AVG.%	AVG	High	PEAK FACTOR	BED NEED	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	OCCUPANCY TYPE single, double, dorm)
MALE ADP:									
Classification-Orientation		4.5%	300.1	401	1.34		DIRECT	56	Single, wet
Classification-Fed		1.6%	104.7	133	1.27		DIRECT	48	Single, wet
Disc Detention (DDU-ADU)		7.0%	463.8	526	1.13		Pod Remote	12/36	Single, wet
Inmate Workers		5.7%	376.3	417	1.11		DIRECT-Pod Remote Hybrid	56	Single, DRY
Maximum (1 & 2)		3.0%	198.8	209	1.05		Pod Remote	16/48	Single, wet
Negative Pressure		0.1%	3.3	7	2.00		DIRECT		Single, wet
Medical Max		0.3%	21.9	29	1.34		Pod Remote		DORM
Medical Infirmary		0.3%	18.6	23	1.23		DIRECT	12	Single, wet
Persistent Mental Illness (PMI)		0.5%	33.1	39	1.17		Pod Remote		Single, wet
Suicidal (level 2)-Spcl Mental Health		0.2%	12.5	16	1.27		DIRECT	28	Single, wet
Medical Min-Med		1.5%	99.4	113	1.13		DIRECT	56	Single, wet
Medium-Minimum (3-8)		40.8%	2702.3	2793	1.03		DIRECT	64	Single DRY
Protective Custody (PC)		0.6%	38.4	50	1.29		Pod Remote		Single, wet
Minimum		10.0%	662.5	734	1.11		DIRECT	40	Dorm
Step Down		0.7%	49.0	60	1.23		Pod Remote	16	Single, wet
Substance Abuse		6.0%	398.6	423	1.06		DIRECT	52	Single DRY
Weekenders		1.0%	66.9	157	2.34		DIRECT	50	Dorm
Youthful Offenders (YO)		2.4%	156.4	167	1.07		DIRECT	12	Single, wet
YO Disc		0.4%	23.2	35	1.50		DIRECT	12	Single, wet
YO Max		0.2%	13.3	20	1.48		DIRECT	12	Single, wet
YO Prot. Custody		0.1%	8.0	13	1.60		DIRECT	12	Single, wet
YO Med-Ment		0.2%	13.3	17	1.27		DIRECT	12	Single, wet
YO Classification- Orientation		0.2%	13.3	17	1.27		DIRECT	12	Single, wet
VOCATIONAL		2.0%	132.5	146	1.10		DIRECT	40	Dorm
Work Release		2.9%	189.5	206	1.09		DIRECT	60	Single DRY
Male Total =		92.1%	6,102	6,746					

CLASSIFICATION - SEPARATION GROUPS	Low	2030 AVG.%	AVG	High	PEAK FACTOR	BED NEED	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	OCCUPANCY TYPE single, double, dorm)
FEMALE ADP:									
Classification-Orientation		0.9%	62.3	87	1.40		DIRECT	56	Single, wet
Classification-Fed							DIRECT	48	Single, wet
Disc Detention (DDU-ADU)		0.5%	33.1	43	1.29		Pod Remote	12/36	Single, wet
Inmate Workers		1.0%	66.3	75	1.13		DIRECT-Pod Remote Hybrid	56	Single, DRY
Maximum (1 & 2)							Pod Remote	16/48	Single, wet
Negative Pressure							DIRECT		Single, wet
Medical Max							Pod Remote		DORM
Medical Infirmary		0.1%	4.0	7	1.67		DIRECT	12	Single, wet
Persistent Mental Illness (PMI)							Pod Remote		Single, wet
Suicidal (level 2)-Spcl Mental Health		0.1%	7.3	10	1.38		DIRECT	28	Single, wet
Medical Min-Med							DIRECT	56	Single, wet
Medium-Minimum (3-8)		3.1%	204.7	232	1.13		DIRECT	64	Single DRY
Protective Custody (PC)							Pod Remote		Single, wet
Minimum							DIRECT	40	Dorm
Step Down							Pod Remote	16	Single, wet
Substance Abuse		1.5%	99.4	113	1.13		DIRECT	52	Single DRY
Weekenders							DIRECT	50	Dorm
Youthful Offenders (YO)		0.2%	13.3	22	1.67		DIRECT	12	Single, wet
YO Disc							DIRECT	12	Single, wet
YO Max							DIRECT	12	Single, wet
YO Prot. Custody							DIRECT	12	Single, wet
YO Med-Ment							DIRECT	12	Single, wet
YO Classification- Orientation							DIRECT	12	Single, wet
VOCATIONAL							DIRECT	40	Dorm
Work Release		0.5%	33.1	42	1.27		DIRECT	60	Single DRY
Female Total =		7.9%	523.4	631					

© KIMME & Associates, Inc.



4. New Pod Types

The work done with the Sheriff's Planning Team documented in the preceding section verifies the primary housing pod concepts created for the existing Central and North facilities during the 1990 master planning. Therefore, many of the new pods will share the characteristics of the existing facilities in significant ways.

However, there were a couple of changes in pod concept that were embraced by the staff based on the knowledge they have accumulated of housing management and changes in their inmate population. These changes are as follows:

- a.) Based on their experience the staff feels that they can manage 64 inmates in a direct supervision, dry cell housing pod, or 8 more inmates than existing pods are designed for. *This was a major concession in the interests of making more staff efficient housing less costly to the county.*
- b.) Discussions led to the creation of a dry cell pod concept where the pod is sub-divided into units and managed in a flexible way. This "hybrid" pod would be in part operated in direct supervision fashion while the other part would be operated in a podular remote fashion. This was meant to specifically address the needs of inmate workers whose group size and work hours vary through the day and the week.
- c.) The team allowed the concept of dormitories, where there are no cells and inmates are in large open sleeping areas immediately adjacent to a dayroom area and shower/toilet facilities. *This concession was made to help reduce construction costs though with current North Carolina standards these pods can only be 40 beds in size thus compromising staff efficiency.*

Additionally, the Sheriff's Planning Team confirmed their commitment to the concept of the 12 bed direct supervision units being built at the youthful offender addition to the North facility believing that they are appropriate for future expansion beyond the 108 beds being added today.

5. Functions Affiliated with Housing Pods

An important element in estimating the square footage and character of a housing pod prior to detail programming, and important groundwork for programming, is to identify the functions that ought to be at the pods in addition to beds, dayrooms and shower/toilet facilities. For the sake of a.) staff efficiency, and b.) most insuring the availability and delivery of services, Mecklenburg County placed a high priority on associating many additional functional components with the housing pods.

The worksheets below identify the sorts of functions that Mecklenburg County wants associated with the housing areas of the various inmate classifications identified. These determinations apply equally to pods for the base scenarios in this chapter and the modified space scenarios appearing in Chapter V.



Mecklenburg County N.C. Detention-Corrections Master Plan

HOUSING WORKSHEET #3

FUNCTIONS TO BE LOCATED AT HOUSING PER CLASSIFICATION

Mecklenburg County

7/19/07

✓ Yes No

Functions/Features included as part of Housing Unit or Pod

Classification/Unit Type:	Secure Entry Vest.	Double Tier OK?	Covered Exer.	PERSONAL VIDEO VISITS	Sick Call	Personal Visits	PRO contact Visits	Video Orientation	Staff Offices	Prob. Hearing	Food re-heat
Classification-Orientation	YES		YES	NO	YES	NO	YES	in dayroom	YES	NO	NO
Classification-Fed	YES		YES	NO	YES	NO	YES	in dayroom	YES	NO	NO
Disc Detention (DDU-ADU)	YES	NO	YES	NO/YES	YES	NO	NO	in dayroom	YES	NO	NO
Inmate Workers	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Maximum (1 & 2)	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Negative Pressure	YES	NO	YES	YES	YES	NO	YES	in dayroom		NO	NO
Medical Max	YES	NO	YES	YES	YES	NO	YES	in dayroom		NO	NO
Medical Infirmary	YES	NO	no	YES	YES	NO	YES	in dayroom		NO	NO
Persistent Mental Illness (PMI)	YES	NO	YES	YES	YES	NO	YES	in dayroom		NO	NO
Suicidal (level 2)-Spcl Mental Health	YES	NO	YES	YES	YES	NO	YES	in dayroom		NO	NO
Medical Min-Med	YES	NO	YES	YES	YES	NO	YES	in dayroom		NO	NO
Medium-Minimum (3-8)	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Protective Custody (PC)	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Minimum	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Step Down	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Substance Abuse	YES		YES	YES	YES	NO	YES	in dayroom	YES	NO	NO
Weekenders	YES		no	YES	YES	NO	NO	in dayroom		NO	NO
Youthful Offenders (YO)	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
YO Disc	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
YO Max	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
YO Prot. Custody	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
YO Med-Ment	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
YO Classification-Orientation	YES	NO	YES	NO	YES	NO	YES	in dayroom		NO	NO
VOCATIONAL	YES		YES	YES	YES	NO	NO	in dayroom		NO	NO
Work Release	YES		no		NO	NO	NO		YES		NO

Classification/Unit Type:	Laundry	Multi-Purp.	VIDEO APPEAR	Storage	Janitor Closet	Linen Stor	STAFF TLT	Prop Lockers	Search
Classification-Orientation	NO	NO	YES	YES	YES		YES		
Classification-Fed	NO	NO	YES	YES	YES		YES		
Disc Detention (DDU-ADU)	NO	NO		YES	YES	YES	YES		
Inmate Workers	NO	YES		YES	YES	YES	YES		
Maximum (1 & 2)	NO	NO		YES	YES	YES	YES		
Negative Pressure	NO	NO		YES	YES		YES		
Medical Max	NO	NO		YES	YES		YES		
Medical Infirmary	NO	NO		YES	YES		YES		
Persistent Mental Illness (PMI)	NO	YES		YES	YES		YES		
Suicidal (level 2)-Spcl Mental Health	NO	NO		YES	YES		YES		
Medical Min-Med	NO	NO		YES	YES		YES		
Medium-Minimum (3-8)	NO	YES		YES	YES		YES		
Protective Custody (PC)	NO	NO		YES	YES		YES		
Minimum	NO	YES		YES	YES		YES		
Step Down	NO	NO		YES	YES		YES		
Substance Abuse	NO	YES		YES	YES		YES		
Weekenders	NO	NO		YES	YES		YES		
Youthful Offenders (YO)	NO	NO		YES	YES		YES		
YO Disc	NO	NO		YES	YES		YES		
YO Max	NO	NO		YES	YES		YES		
YO Prot. Custody	NO	NO		YES	YES		YES		
YO Med-Ment	NO	NO		YES	YES		YES		
YO Classification-Orientation	NO	NO		YES	YES		YES		
VOCATIONAL	NO	YES		YES	YES		YES		
Work Release	YES	NO		YES	YES		YES	YES	

© KIMME & Associates, Inc.



6. Housing Pod Breakdowns of the Future – Base Projection

The final exercise in developing an outline of future housing needs is to create a list of housing pods and units responsive to those needs while also taking into account that which already exists. Below are lists of housing pods needed for year 2020 needs to complement existing housing capabilities. The first list describes pod needs for the Base 2020 ADP projection and the second list describes needs for the Base 2030 projection.

These pod projections take into account the 108 Youthful Offender beds (9 pods of 12 beds each) being constructed at the North campus.

2020 - HOUSING POD NEEDS - PHASE 1; 2,404 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2020; 2,404 beds added, 5,180 Beds total when completed.

Phase 1

4/10/08

BASE

Pods

TYPE 1; 50 BED, POD REMOTE DORM	0
TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	20
TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	0
TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	4
TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	6
TYPE 6; 50 BED, DORM, DIRECT (Weekender)	2
TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	8
TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	10

TOTAL NEW PODS:

50

2030 - HOUSING POD NEEDS - PHASE 2 2,144 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2030; 2,144 new beds added, 7,324 Beds total when completed

Phase 2

4/10/08

BASE

Pods

TYPE 1; 50 BED, POD REMOTE DORM	
TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	16
TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	2
TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	6
TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	4
TYPE 6; 50 BED, DORM, DIRECT (Weekender)	
TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	8
TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	10

TOTAL NEW PODS:

46



D. ESTIMATING FUTURE SUPPORT AND GROSS AREA SPACE NEEDS

1. Approach

By reviewing the various functions within the three existing facilities, the sheriff's planning team and the consultants were able to identify components with insufficient space. In discussing the extent of inadequacy, the consultants were in many cases able to determine the degree to which a function or particular spaces were deficient. These quantifications provided the consultants with a basis for estimating the amounts of space needed to make-up the deficiencies noted and thus to derive actual current needs per current population. This then set-up the basis for estimating future support space needs.

Before any adjustments could be made, the consultants needed to identify the actual component square footages available to the different functions that were being judged inadequate in terms of current day needs. It was recognized that operations have changed and developed since the facilities opened and that current needs were different than original needs to some degree. Since electronic versions of the drawings were not available, the consultants obtained hard copy drawings of the North, Central and WRRRC facilities. K&A then hand calculated the square footages available for the various components that were judged deficient by the planning team.

2. Functional Component Worksheets

Assessing the adequacy of all existing functional components and identifying new components that should be part of future facilities is a key first step to option development, regardless of how well existing facilities operate or were conceived. With the passage of time populations, policies, operations, laws, and needs change.

The assessment was done in working sessions with the Sheriff's Office planning team. It was facilitated through use of a "function worksheet" and tours of the existing facilities. A functional component worksheet was completed for each facility in the system: North, Central, and the Work Release and Restitution Center (WRRRC).

As one will understand from a review of the function worksheets there are a number of inadequacies other than a lack of bed capacity in the otherwise very well-designed and very well-maintained facilities.

a. Central Facility Function Checklist

The completed Function Checklist for the Central facility appears below. The checklist has multiple elements. One documents the existence and need for certain functions in checklist form on the left of the worksheet. Then there is detail narrative commentary in the center. Finally, there is a checklist on the right that rates the adequacy of the existing space available to the function.

Most notable among the deficiencies recorded for Central are intake-arrest processing space, inmate property storage, arresting officer parking, medical space and general storage space. Other space shortages recorded include staff training space, contact visiting space, and staff support areas. The latter space concern is particularly noteworthy in light of



the staff recruiting and retention challenges documented in an earlier study on that subject done by the consultants as part of the Detention-Corrections master plan study process.*

A particularly interesting area of space deficiency is that of inmate program space and program staff space. As pretrial inmate lengths-of-stay have increased and the system has shifted increasingly toward that of a pretrial detention system due to changes in state law, the emphasis in programming has shifted as well. Thus, the Central facility, which is exclusively a pretrial facility, has seen its mission shift more toward inmate programming in ways not defined by the original space program and design of a decade-and-a-half ago. As a result, the demand for program-related space has exceeded the supply. In terms of future planning, the Central facility, if expanded, should add more program space for the existing capacity and provide a proportionately greater amount of program space for future bed capacity.

Central's Function Checklist follows on the next several pages.

* Detention Division Staffing Plan Review, Mecklenburg County Sheriff's Office, October 2007.



Mecklenburg County N.C. Detention-Corrections Master Plan

FUNCTION CHECKLIST - Detention

MECKLENBURG COUNTY
CENTRAL FACILITY

August 7, 2007

SPACE RATING
PER CURRENT ADP:

HAVE NEED (must have) Don't Have, WANT			CENTRAL	REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MALE ADULT HOUSING	Housing must be adequate to house inmates until released .	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FEMALE ADULT HOUSING	Female population shows signs of increasing; present housing is proving to be inadequate.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MALE JUVENILE HOUSING	Youthful Offenders at Jail North; addition being built. Juvenile population is on the increase must have more bed space for this group of inmates (not at Central).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FEMALE JUVENILE HOUSING	N/A Central. Presently, there is no place in the county to house this type of inmate.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WORK RELEASE HOUSING	N/A Central. At WRRRC. Presently space is adequate since there are always space available at WRRRC.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WEEKENDER HOUSING	Currently space is adequate for this group of inmates	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BOARDING INMATES FOR OTHERS	No space for inmates of this type; would accommodate them if room was available, price was right.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VEHICLE SALLY PORT	In Arrest Processing. Current space not adequate for number of arrests made. Inadequate for releases and transfers. Will lose some parking for upcoming Intake expansion. Not uncommon for 5-7 cars parking on dock side at Peak times. ICE Motor Coach blocks drive, must move to dock area, cause patrol cars to leave via truck entry.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ARRESTEE BOOKING/INTAKE	In Arrest Processing. Insufficient space available for processing a large number of arrestees because overcrowding backs-up intake. Intake is adequate after proposed renovations for current intake numbers only, up to maybe 48,000 annually. Property storage is deficient (keeps property for North too). Records deficient, mix in with property & finance; need separate records (adjacent to release and property). Space for nurses will be adequate post-renovation. Awkward to move arrestees up elevator. Sobriety testing upstairs, brings arresting officers deep into facility.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SEPARATE RELEASE AREA	Current release area is separate, but can't handle large prison trip/ICE release on top of normal releases (space & staff issue). Staff workstations and holding cells the issue. Have 3 cells, 8-11 needed. OK otherwise.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	TEMPORARY JUVENILE HOLDING	Need is becoming great due to the increase in this inmate population (youthful offenders); now move them to North as quickly as possible. Good candidate for intake at a satellite facility.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SEPARATE WORK RELEASE INTAKE	N/A to Central after initial post-sentencing intake. Not done in space separate from normal arrestee intakes; current space appears to be adequate. Don't move to WRRRC; screening and other functions at Central not worth replicating. Many work releases start stay at Central for up to week.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	INMATE TRANSPORT OFFICE/STORAGE	This space would be needed to organize inmate transportation; office + storage	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COURT STAGING/TRANSPORT HOLDING	Only 4 cells; more space (holding cells [6-8 more] & corridor) needed to handle today's inmate population. Staffing deficient too.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WARRANTS	In Arrest Processing. More space is needed to handle the increasing number of warrants/OFA's. Have 1/2 of need. Lektriever OK.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>



Mecklenburg County N.C. Detention-Corrections Master Plan

HAVE NEED (must have) Don't Have, WANT	CENTRAL FACILITY		August 7, 2007		ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
	HAVE	NEED			
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		JAIL ADMINISTRATION	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		PUBLIC LOBBY	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		MEDIA ROOM/PUBLIC INFO CENTER	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		PUBLIC MEETING ROOM/TRAINING/P.R.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	COMPLAINT ROOM/PUBLIC SERVICE ROOM	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		SEPARATE STAFF ENTRY	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		STAFF LOCKERS	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		STAFF BRIEFING/TRAINING	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		STAFF TRAINING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		STAFF BREAK	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	STAFF POSTS	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		STAFF DINING	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		KITCHEN	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		KITCHEN SERVING OTHER AGENCIES	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		RECEIVING KITCHEN ONLY	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		BULK FOOD STORAGE (extra-normal)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		FULL-SERVICE LAUNDRY	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	LAUNDRY SERVING OTHER AGENCIES	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>		RECEIVING LAUNDRY	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		CONTACT VISITING	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	NON-CONTACT VIDEO VISITING	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		NON-CONTACT PRO VISITING	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



Mecklenburg County N.C. Detention-Corrections Master Plan

HAVE NEED (must have) Don't Have, WANT			CENTRAL	REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FAMILY VISITING	What we have is adequate; earned contact visits w/children. Adequate today only. Use contact visit above on weekends.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OUTDOOR VISITING	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	HEARINGS (PROBATION, ETC.)	Need video appearance and (separate) hearing room. Internal Affairs, etc.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MEDICAL HEALTH CARE	More space is needed to provide the necessary care to these inmates. Eye exam, dialysis (5-10) needed, send out of building now; chemotherapy as well (sent 3 out). Clinic insufficient in terms of pharmacy, exam, records, nurse stationsDOUBLE clinic/pharmacy for today's population	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MENTAL HEALTH CARE	Now integrated with medical; should be separate due to behavior vulnerability. Should be adjacent to medical. (More space is needed to house these inmates due to their medications.)	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PHARMACY	Larger pharmacy is needed to accommodate the larger population (double the size).	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MEDICAL ISOLATION	Much more room is needed for the purpose of isolating certain inmates.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	INMATE COMMISSARY	Aramark provides with Central staff help (identify, sort, distribute). Insufficient; no sorting room or tables, inadequate receiving; needdouble the space overall.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EDUCATION/PROGRAMS	Access to programs requires escort; staff inefficient. Shortage i classrooms (15 person limit). 4th floor (female floor) is 3 classrooms short of need; 5th floor adequate (substance abuse inmates); 6th floor is adequate for numbers eligible; 3rd floor; there is no programming. Inadequate on-pod individual counselin space. Lack of substance abuse staff office space (space is not on 4th but by mass arrest); chaplains lack good office space. Lack space for 2 new program staff about to come on duty. Library space is insufficient, now in multi-purpose space (~25% more book storage needed). Law library is in multi-purpose libra space, needs to expand (2 more Law Library PCs needed). Huge demand for GED (get this from Central Piedmont Community College).	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COUNSELING	Must increase our ability to counsel inmates in private.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	RELIGIOUS	Issues: baptism; communion, confession, bible study all in the same program space.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	JAIL INDUSTRY	N/A Central. Inmates who qualify should have the opportunity to participate in this program (North).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	JAIL GARDEN PROGRAM	N/A Central. Not sure inmates would be in the system long enough to benefit from this program (North).	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	INDOOR EXERCISE	We already have space for this function on each floor (not affiliated with pods). Inefficient in that it requires movement an additional staff to monitor.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	OUTDOOR EXERCISE	Integrated with Indoor Exercise by introducing outdoor air. What we have is adequate	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	COURT ROOM	Not needed at Central. New courtrooms across street just went on line.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	VIDEO COURT	Video appearance at Classification/Orientation pods; bond hearings would also be useful in a perfect world. If each pod had this ability inmates wouldn't need to be moved to go to video arraignment. Less efficient but still cost-effective alternative: on floor capability	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VIDEO CONFERENCING	Good capability for medical, other matters. Good to have potential for each pod.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



Mecklenburg County N.C. Detention-Corrections Master Plan

<div> <div>HAVE</div> <div>NEED (must have)</div> <div>Don't Have, WANT</div> </div>			CENTRAL	REMARKS/QUALIFICATIONS:	<div> <div>ABUNDANT</div> <div>ADEQUATE</div> <div>INADEQUATE</div> <div>VERY INADEQUATE</div> </div>			
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ON-SITE MAINTENANCE	We have this ability for the vast majority of our maintenance needs. Somewhat insufficient space for equipment. This is a contract service.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MAINTENANCE WORK SHOP	Available on-site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PARTS AND MAINTENANCE SUPPLY STORAGE	While we have this ability, all parts are not kept in storage at our facilities. SEE ABOVE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	CENTRAL HOUSEKEEPING	On contract; same as maintenance; 2nd floor space.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OUTDOOR GROUNDS STORAGE	Not necessary; contract service	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	GENERAL STORAGES	VERY INADEQUATE. Linens, extra mattresses, supplies, . Could u double to quadruple the space we have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STAFF PARKING	Staff parking will need to increase do to the increased number of staff. Now pay a reduced rate for stall at county garage. Count garage for sheriff is sufficient for Central, not visiting staff.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COVERED PARKING - OFFICIAL VEHICLES	In Arrest Processing Sallyport. As staff grows more official parking will be needed. Administrator, Chaplain, 2 transports vans, AP & ICE marked-units park there now. Need third transportation van.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PUBLIC PARKING	Additional parking will be needed to accommodate visitors either doing business with staff or visiting inmates. Now, visitors park wherever they can find it. There is no dedicated parking affiliate with the facility.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	STAFF EXERCISE	Fitness equipment, weights, etc. Current room too small Sometimes 5/6 people at once; very tight. Could serve 20/time Need lockers. Could be part of staff retention strategies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	STAFF RESOURCE CENTER:	PERIODICALS, COMPUTER, TRAINING VIDEO, READING AREA.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

© KIMME & Associates, Inc.



b. North Facility Function Checklist

The completed Function Checklist for the North facility follows on the next several pages. Aside from the need for additional bed capacity the most significant space deficiencies were noted in the area of staff support. As with the Central facility, the relevance of this is greater than normal because it speaks to the issue of staff recruitment and retention.

Interestingly, the amount of inmate program space is inadequate for current needs. The facility, which was intended as a facility for sentenced inmates, was programmed and designed with a significant amount of program space. However, though the facility actually houses a large number of pretrial inmates today, an aggressive approach to programming meant to address problems leading to criminality has generated the need for a higher proportion of program space per inmate. This deficiency would need to be addressed even if additional bed capacity, such as that provided by the new Youthful Offender addition (108 beds) and the new Sprung facilities (640 beds) were not to occur.

Another notable deficiency in terms of space and function at North is the lack of medical space. At one time it was thought that only the Central facility needed to provide significant medical facilities. However, this need has grown at North with the presence of more pretrial inmates and youthful offenders. It will certainly grow more as the facilities are expanded with the Youthful Offender and Sprung facilities and as the population becomes more diverse (pretrial, special needs, and not just sentenced inmates as originally intended).



AUGUST 7-8, 2007

SPACE RATING
PER CURRENT ADP:

HAVE NEED (must have) WANT, Don't Have				REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
X	X		MALE ADULT HOUSING	Much more space is needed to handle the rise in sentenced inmates.	
X	X		FEMALE ADULT HOUSING	While we housing for females more is needed to handle the rise in this population. N/A	
			MALE JUVENILE HOUSING	N/A NORTH. More housing to handle the rise in this population a Gatling is needed.	
			FEMALE JUVENILE HOUSING	N/A NORTH. Much needed; no place in the county to house this population. Housed out of county now.	
			WORK RELEASE HOUSING	N/A NORTH. Not at this facility but WRRC.	
			WEEKENDER HOUSING	Not at North only at Central. County could benefit from a facility of this type for juveniles.	
		X	BOARDING INMATES FOR OTHERS	Not at North. Only if space available and price met.	
X	X		VEHICLE SALLY PORT	Already have this, but it could be expanded to handle larger transport vehicles. Specifically, ICE motor coaches are too tall for the sally port doors. Otherwise adequate for buses and vans. The new Youthful offender building possibly blocks expansion.	
X	X		INMATE RECEIVING	Transfer receiving and release only, not arrestee intake. Adequate for today's needs. Property, staging, holding need more space at the point of growth.	
			SEPARATE RELEASE AREA	Not needed; done in same area as receiving; transfers only, no releases to street. Space available is adequate for population.	
	X		TEMPORARY JUVENILE HOLDING	Now use separate holding cells; this is adequate.	
			SEPARATE WORK RELEASE INTAKE	N/A. This is already in place (WRRC) (Also, no Releases done from Jail North.)	
X	X		INMATE TRANSPORT OFFICE/STORAGE	This function is in place, but more staff and vehicles are needed. Transfer for releases. No office space needed now.	
X	X		COURT/TRANSPORT HOLDING	Already in place. Larger transport service is needed (sometimes execute 6/7 trips with van).	
			WARRANTS	N/A	
X	X		JAIL ADMINISTRATION	Already in place: maxed-out now, could use more space. Need mailroom for system with North being the best location. All offices are filled, sheriff's business management needs more space and cubicles (though business management doesn't need to be at North). North administration would fill the space if Business Management moved.	
X	X		PUBLIC LOBBY	Adequate for 50% expansion. (separate video visit center would greatly reduce traffic)	
		X	MEDIA ROOM/PUBLIC INFO CENTER	Don't have. A room of this type on the grounds would reduce the need to leave the facility.	
		X	PUBLIC MEETING ROOM/TRAINING/P.R.	NOT NEEDED but a room of this type would improve public access to the administration and provide staff with more space for proper training.	
		X	COMPLAINT ROOM/PUBLIC SERVICE ROOM	Don't need this but it would be nice for the public to have a place of confidence to file complaints and conduct interviews.	

K&A



Mecklenburg County N.C. Detention-Corrections Master Plan

			NORTH FACILITY		REMARKS/QUALIFICATIONS:				
HAVE	NEED (must have)	WANT, Don't Have				ABUNDANT	ADEQUATE	INADEQUATE	VERY INADEQUATE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			PHARMACY	Already have , capacity should be increased due to increased inmate population; adequate at the moment.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			MEDICAL ISOLATION	Need at North, add as part of expansion. More space is needed for this population of inmate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			INMATE COMMISSARY	Already in place. Adequate, also has room for expansion.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			PROGRAM/EDUCATION	Adequate for current population, but would do more if had more (2 more classrooms in addition to proposed Vocational classrooms). Need a program area; need four more offices that are available now. Need more space for expansion. 15 occupancy is the preferred maximum size for classes, 20 if necessary. Separate program for Youthful Offender and adult, if possible.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			COUNSELING	More needed, 1 for every pod is preferred.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			RELIGIOUS	Have chapel, use classrooms for programs; once did services, but will not in future.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			JAIL INDUSTRY	Vocational Building soon; oriented toward current population, should master plan for more. This could help inmates become self sufficient. Don't have need for Industry stays too short.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			JAIL GARDEN PROGRAM	Greenhouse soon. Dedicate space for more, greenhouse or other. This could help inmates learn a trade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			INDOOR EXERCISE	Don't need a centralized space. Already have exercise as part of pods. Size of area could be increased though.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			OUTDOOR EXERCISE	Outdoor exercise area could help inmate management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			COURT ROOM	N/A	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			VIDEO COURT	Looking at upgrading. Each pod set (knot of the bowtie) should have this capacity. Infrastructure in place	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			VIDEO CONFERENCING	Capability needed in Medical. Generally, capability in housing area is desired. This could reduce the need to transport inmates.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			ON-SITE MAINTENANCE	Already have. Adequate for today.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			MAINTENANCE WORK SHOP	Already in place. Adequate for today.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			PARTS AND MAINTENANCE SUPPLY STORAGE	Some maintenance items go lacking due to a lack of spare parts on hand to quickly make repairs.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			CENTRAL HOUSEKEEPING	Already in place. Adequate.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			OUTDOOR GROUNDS STORAGE	Have added garages, adequate now, contract service. Good for some time to come; more building, less grounds, some tools and chemicals could be stored outside the facility	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			GENERAL STORAGEES	Need more space. Already have, but more space could be added. Could use 50% more.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			STAFF PARKING	Adequate except when training and other special events occur (several days a week). Will need more space. Staff side fills first overflows to public lot. Public side consistently full, some staff from administration, trainees, public.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			COVERED PARKING - OFFICIAL VEHICLES	Don't need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>			PUBLIC PARKING	Will need more space. Already have, but should be increased to handle increase of visitors due to rise in population	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>			OTHER: TRAINING ACADEMY	Additional parking.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			OTHER:		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

© KIMME & Associates, Inc.



c. WRRC Function Checklist

The Function Checklist as completed for the WRRC appears below. The WRRC is the only facility of the three in the system not facing crowding problems. The 150 bed facility averaged only 79 inmates per day in fiscal year 2006-07 and averaged only 88 per day through the first seven months of fiscal year 2007-08. Thus, its spatial inadequacies are generally in other areas.

Consistent with the other facilities there are staff space related issues that should be noted in future planning. Chief among these is the need for an inmate entry separate from the staff and public. Additionally, staff office space, break area and dining space is lacking. Regarding dining, officers and staff must now dine with inmates because the staff break area is too small, thus losing the most significant break opportunity of the day for facility personnel.

Other than staff-related space, the most significant space deficiencies appear in the areas of additional multi-purpose room space, laundry, and general storage space.



Mecklenburg County N.C. Detention-Corrections Master Plan

FUNCTION CHECKLIST - Detention

MECKLENBURG COUNTY
WRRC

AUGUST 8, 2007

HAVE NEED (must have) WANT, don't have			WRRC	REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	MALE ADULT HOUSING	<u>Already have space for this that is not at capacity</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	FEMALE ADULT HOUSING	<u>Housing appears to be adequate</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MALE JUVENILE HOUSING	<u>N/A</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FEMALE JUVENILE HOUSING	<u>N/A</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WORK RELEASE HOUSING	<u>Space appears to be adequate</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	WEEKENDER HOUSING	<u>Could use available beds for this purpose; now at Central.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	BOARDING INMATES FOR OTHERS	<u>Maybe as a way to fill vacant beds only.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	VEHICLE SALLY PORT	<u>Not necessary, but desirable. A sally port will enhance security while bringing inmates to WRRC.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ARRESTEE BOOKING/INTAKE	<u>N/A. Inmates are initially booked at Central, then brought to WRRC.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SEPARATE RELEASE AREA	<u>N/A. No arrestee release needed since this function not performed here.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	TEMPORARY JUVENILE HOLDING	<u>N/A</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SEPARATE WORK RELEASE INTAKE	<u>Entrance is same as public & staff; would like to separate. Inmate Tool room is available.</u>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	INMATE TRANSPORT OFFICE/STORAGE	<u>Need a separate area not visible to other inmates (now in middle of housing).</u>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COURT/TRANSPORT HOLDING	<u>People go to court on pass. There already a facility for this.</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WARRANTS	<u>N/A</u>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	JAIL ADMINISTRATION	<u>Inadequate. 3 offices short. Conference too small, poorly located (affiliated w/office).</u>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	PUBLIC LOBBY	<u>Current space is adequate for this; problem that everything focuses off this. Should split movements (resident/day reporter access separate, though day reporters may move out.)</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	MEDIA ROOM/PUBLIC INFO CENTER	<u>Multi-purpose room does this adequately.</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PUBLIC MEETING ROOM/TRAINING/P.R.	<u>Have multi-purpose room that is sometimes crowded, second multi-purpose may solve. A training room at WRRC would be good for staff</u>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	COMPLAINT ROOM/PUBLIC SERVICE ROOM	<u>Low frequency; existing multi-purpose room, conference room, counseling room. Don't do in lobby, private offices.</u>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>



Mecklenburg County N.C. Detention-Corrections Master Plan

HAVE NEED (must have) WANT, don't have	WRRC	REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	SEPARATE STAFF ENTRY	Staff must have an entrance apart from inmates.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF LOCKERS	Non-office Staff should have a place to store personal belongings. 1/2 height lockers would be adequate. Coats, purses, gym bags.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	STAFF BRIEFING	No need today, on-post briefing. Plan future capability.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF TRAINING	Use multi-purpose room now.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF BREAK	Break room staff uses is too small; needs to accommodate 10-15. Was to be downstairs. Now eat lunch with inmates, can't get away.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF POSTS	Facility has several posts; adequate.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF DINING	Staff currently use the same dining facility as the inmates; not appropriate.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	FULL SERVICE KITCHEN	Contract services - Aramark. If WRRC had a full service kitchen for the 150; could do more meals, but probably not 300. Staff meals included; are the same as those eaten by inmates. Aramark staff prepare staff meals.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	KITCHEN SERVING OTHER AGENCIES	Serve three senior nutrition centers. Aramark delivers.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	RECEIVING KITCHEN ONLY	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	BULK FOOD STORAGE (extra-normal)	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	FULL-SERVICE LAUNDRY	Inmates wash their own clothing and linens; need bigger space, more equipment.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	LAUNDRY SERVING OTHER AGENCIES	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	RECEIVING LAUNDRY	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	CONTACT VISITING	Already have this in place.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	NON-CONTACT VISITING (VIDEO?)	No need but this could have some use at WRRC.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	NON-CONTACT PRO VISITING	No need, but this would help control contraband.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	FAMILY VISITING	Adequate. Already have this in place (contact visiting).	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	OUTDOOR VISITING	Have in courtyard. Adequate. This might help inmates readjust to society.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	HEARINGS (PROBATION, ETC.)	A space for such hearings could improve our WRRC operation. Second multi-purpose room would accommodate.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	MEDICAL HEALTH CARE	Have part-time nurse during week. 24-hour care could be helpful. Current space is adequate.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	MENTAL HEALTH CARE	Contracted psychologist 1/week, meet as needed. No need for space now, future: individual interview room for privacy.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>



Mecklenburg County N.C. Detention-Corrections Master Plan

HAVE NEED (must have) WANT, don't have	WRRC	REMARKS/QUALIFICATIONS:	ABUNDANT ADEQUATE INADEQUATE VERY INADEQUATE
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	PHARMACY	Meds storage only. Space adequate for securing meds.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	MEDICAL ISOLATION	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	INMATE COMMISSARY	Non-issue.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	EDUCATION	At CPCC. Education programs are already in place. <u>Adequate.</u>	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	COUNSELING	Space adequate. Programs of this type are already in place.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	RELIGIOUS	N/A. Go out to services; no separation by Male-Female for in-house program. Religious programs are in place already.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	JAIL INDUSTRY	N/A. No room at site for this.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	JAIL GARDEN PROGRAM	N/A. No room at site for this.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	INDOOR EXERCISE	No need, provide passes to aquatic center. Inmates have indoor activity already.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	OUTDOOR EXERCISE	Courtyard, horseshoe pit, V-ball; adequate for today. Outdoor recreation in a secured area would be good for WRRC.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	COURT ROOM	N/A	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	VIDEO COURT	Not needed.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	VIDEO CONFERENCING	Non-issue. Legal matters could be handled from WRRC.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	ON-SITE MAINTENANCE	OK today, would need to increase for future.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	MAINTENANCE WORK SHOP	None, now. We have maintenance available for WRRC to clean and repair as needed.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	PARTS AND MAINTENANCE SUPPLY STORAGE	While maintenance is available for WRRC, a parts house on the grounds would improve efficiency.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	CENTRAL HOUSEKEEPING	Stored with general storage. See below. this is performed by WRRC inmates.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	OUTDOOR GROUNDS STORAGE	Use Shed. Should be integrated in building plan. Certain tools and chemicals could be stored outside the building, though.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	GENERAL STORAGES	Very Inadequate. Double the current space is needed. Space should be available for supplies and property.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	STAFF PARKING	Adequate at parking garage. But, staff should be able to park at their place of work.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	COVERED PARKING - OFFICIAL VEHICLES	N/A	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	PUBLIC PARKING	Limited shared use parking at building.	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	OTHER:	MAJOR ISSUES, STORAGE, SEPARATE ENTRANCE, OFFICE SPACE, WASHER-DRYER.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

© KIMME & Associates, Inc.



3. Current Support Space Deficiencies Per The Function Checklists

a. Current Central Facility Support Space Deficiencies and Needs

On the following several pages are tables that, a.) identify different functions within the Central facility, b.) narratively summarize perceived space deficiencies, and c.) estimate the additional net and/or gross square footage required to resolve perceived space problems. Please note that the list does not attempt to identify every space or area in the buildings but principally those of significance to identifying additional current space needs.

An estimated 28,029 additional gross square feet are needed to resolve all of the space deficiencies identified at the existing Central facility as can be seen at the bottom of the table. If this square footage was added to the building it would raise the existing total of 702,884 g.s.f. to 730,913 g.s.f. (combined housing and non-housing space). Of more relevance for future space estimating is the fact that the current gross square feet per bed would rise from 369 to 384, or an additional 15 g.s.f. per bed, in order to satisfy the current support and programmatic needs of the Central facility.



Mecklenburg County N.C. Detention-Corrections Master Plan

CENTRAL - Mecklenburg County, NC

3/19/08

Calculation of Additional Square Footage Currently Needed

702,884 gsf existing

369 gross sq. ft./bed

SELECTED SPACE ANALYSIS PER FUNCTIONAL CHECKLIST WORKSHEET DEVELOPED WITH SHERIFF'S PLANNING TEAM:

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
LEVEL 1					
Property		5,478	Property, male & female dress/shower, finance, property exchange. Property storage deficient (keeps property for North too). Records deficient, mixed in with property & finance; need separate records (adjacent to release and property).		1,370
Magistrates		3,123	7 inmate stations, 3 public stations		
Magistrate - Pretrial Waiting		1,881	Officer station, toilets, 3, 12 seat areas, 1, 6 seat area		
Pretrial Court Services		912	6 inmate stations, 2 public stations.		300
Intake		4,279	6 holding cells, medical exam, storage, toilets, 3 visiting, staff station, 5 seating areas (46 seats). Insufficient space available for processing a large number of arrestees because overcrowding backs-up intake. Intake is adequate after proposed renovations for current intake numbers only, up to maybe 48,000 annually.		1,000
			Current release area is separate, but can't handle large prison trip/ICE release on top of normal releases (space & staff issue). Staff workstations and holding cells the issue. Have 3 cells. 8-10 needed.		1,050
			Only 4 cells for Court Staging; more space (holding cells [6-8 more] & corridor) needed to handle today's inmate population. Staffing deficient too.		980
Sobriety		2,079			
Vehicle Sally Port			Current space not adequate for number of arrests made. Inadequate for releases and transfers. Will lose some parking for upcoming Intake expansion. Not uncommon for 5-7 cars parking on dock side at Peak times. ICE Motor Coach blocks drive, must move to dock area, cause patrol cars to leave via truck entry. 20 more cars + drive.		7,000
LEVEL 2					
Clinic-Pharmacy		6,406	More space is needed to provide the necessary care to these inmates. Eye exam, dialysis (5-10) needed, send out of building now; chemotherapy as well (sent 3 out). Clinic insufficient in terms of pharmacy, exam, records, nurse stations. DOUBLE clinic/pharmacy for today's population.		6,400
Plumbed Cell Pod		3,889	Level 3, Sheet 4.3-7		
Dayroom - Cell Pod (nsf)	2,278				
- Stair intrusions	195				
- Control intrusion	38				
LEVEL 2					
			Sheets 4.3-5 & 4.3-6		
Shift Supervision		635	2 offices, open work		
Master Control (Sheet 4.3-6)		890	MC room, UPS room, toilet, coffee alcove, security vestibule. unaffiliated with pod.		
Outdoor Recreation	563				
Visiting		279	3 non-contact, corridor		
Line-Up		1,339	Line-up rooms, line-up waiting, line-up interview		
Laundry		5,222	Laundry, office, mechanical, soap storage, mending, break, clean linen, toilet		
LEVEL 3					
PROGRAMS-GENERAL			Access to programs requires escort; staff inefficient. Shortage in classrooms (15 person limit). 4th floor (female floor) is 3 classrooms short of need; 5th floor adequate (substance abuse inmates); 6th floor is adequate for numbers eligible; 3rd floor; there is no programming. Inadequate on-pod individual counseling space. Lack of substance abuse staff office space (space is not on 4th but by mass arrest); chaplains lack good office space. Lack space for 2 new program staff about to come on duty. Library space is insufficient, now in multi-purpose space (≈25% more book storage needed). Law library is in multi-purpose library space, needs to expand (2 more Law Library PCs needed). Huge demand for CED (get this from Central Piedmont Community	4,100	



Mecklenburg County N.C. Detention-Corrections Master Plan

CENTRAL - Mecklenburg County, NC

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
Activities Room (nsf)	210		Sheet 4.3-7		
Counseling (nsf)	92		Sheet 4.3-7		
Program Offices		3,250	Case managers area, 2 offices, conference, clerical, vestibule, coffee, toilets, small storage.		
Multi-Purpose	383		Counter and sink		
Visiting & Floor Control		1,397	11 non-contact visiting, floor control, 2 non-contact attorney visit. Central facility is in need of more contact visiting space for attorneys and police. 2 more would be adequate today.	240	290
Floor Control (nsf)	123		No toilet		
LEVEL 4			Sheets 4.3 - 10811		
Activities room (nsf)	205				
Counseling (nsf)	86				
Program Offices - Library		3,250	5 offices, library, work areas, interview, clerical, reading room, legal library, copy, storage		
- Library	1,384				
Multi-Purpose	383				
Visiting & Floor Control		1,397			
LEVEL 5					
Multi-Purpose (nsf)	198				
- Storage (nsf)	36				
Visiting - Floor Control		1,397			
Multi-Purpose (nsf)	383				
LEVEL 6					
Multi-Purpose (nsf)	198				
- Storage (nsf)	36				
Multi-Purpose (nsf)	198				
Program	84				
Visiting - Floor Control		1,233	11 non-contact stations, floor control, (0 attorney)		
Storage (nsf)	990				
Staff Lounge	414				
LEVEL 1					
Basic Block (8,437 gsf)	8,438				
Office Administration	5,890		Sheet 4.3-4; 7 offices, mailroom, records, workroom, reference room, electrical, administrative assistant, data process director, equipment		
Food Service		5,157	Receiving/re-therm kitchen too small; went to cold lunch to address shortages (but would keep practice - good thing). Kitchen is too small to handle present inmate population. Delivery OK. Frozen food storage insufficient.		1,300
Staff Dining (nsf)	997		Adjacent to kitchen	249	300
Vending (nsf)	107		4 machines		
STAFF AREA		6,886	Female/male locker/showers, physical conditioning, roll calls, fire control, staff lounge		
- Roll call - briefing (nsf)	972		Current is inadequate for present staff. Projected JAIL staff numbers will require much more space. Shift briefing in Roll Call (≈150 staff); used for shift training, AP/records/classification/pretrial briefs separately in large conference: too small for this (must handle 35-40/shift).	486	540
- Male lockers/showers		1,893	304 lockers, 4 showers, 2 toilets, 1 urinal, 4 sinks. Currently have lockers, but most are too small for a uniform to hang in. Insufficient number of lockers. Staff come to work in uniform. Current lockers: 12' wide, 18" deep, half-height. Prefer full-height lockers.		2,370
- Female lockers/showers		915	182 lockers, 3 showers, 3 toilets, 2 sinks. Currently have lockers, but most are too small for a uniform to hang in. Insufficient number of lockers. Staff come to work in uniform. Current lockers: 12' wide, 18" deep, half-height. Prefer full-height lockers.		1,150



Mecklenburg County N.C. Detention-Corrections Master Plan

CENTRAL - Mecklenburg County, NC

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
BASEMENT LEVEL					
General Storage (nsf)	788		VERY INADEQUATE. Linens, extra mattresses, supplies, . Could use double to quadruple the space we have.	1,575	1,800
Commissary Storage (nsf)	907		Aramark provides with Central staff help (identify, sort, distribute). Insufficient; no sorting room or tables, inadequate receiving; need double the space overall.		900
Housekeeping (nsf)	261				
- Supervisor's Office (nsf)	99				
- Chemical Storage (nsf)	51				
Maintenance Storage (nsf)	160				
Re-cycle Center (nsf)	416				
Maintenance		809	Lockers, toilet; supervisor office, storage		
Maintenance Storage (nsf)	155				
Flamables Storage (nsf)	80				
Docks			3 original, 2 new		
BASEMENT LEVEL (new Addition)					
Stancil Center Training Area		5,119	2 offices, training, storage, lobby/clerical, anterooms; toilets, open office. Stancil Center. More space is needed for this function since current space can't handle a large staff meeting (occupancy = ~110).		1,280
- Training Room (nsf)	1,418				
- Training Room Storage (nsf)	284				
Expanded Kitchen		2,930	Sheet A3.5; dry storage, pot wash, 2 coolers, freezer, general support		
NEW ADDITION					
LEVEL 1					
Sergeant Office (nsf)	116				
Office (nsf)	147				
LEVEL 1 MEZZANINE					
Sergeant Office (nsf)	103				
Medical		1,388	Pharmacy, office, nurse desk, office desk, 2 exams, 3 waiting rooms, staff toilet, janitor closet, inmate toilet.		
LEVEL 3 (A 3.14)					
Sergeant Office	107				
Multi-Purpose	203				
Hearing Room	107				
Chaplain Office	104				
LEVEL 5 & 6 (A3.18)					
Sergeant Office	107				
Multi-Purpose	203				
Hearing Room	107				
Chaplain Office	104				

TOTAL ADDITIONAL GROSS SQ. FT. NEEDED: **28,029**

TOTAL EXISTING GROSS SQ. FT.: **702,884**

REVISED TOTAL GROSS SQ. FT. REFLECTING TODAY'S NEEDS: **730,913**

Beds: **1,904**

current gross square feet per bed: **369**

gross square feet per bed with additional space: **384**

additional Space per bed: **15**

KIMME & Associates, Inc.



b. Current North Facility Support Space Deficiencies and Needs

The calculation of additional square footage currently needed for the North facility follows below. This calculation was done using the same process described above for the Central facility.

The estimate shows that the North facility needs an estimated 10,288 g.s.f. of additional space in order to meet current demands for program and support space. It would raise the existing 281,838 g.s.f. total square footage of North to 292,126 g.s.f. In terms of square footage per bed it would raise the current gross square foot total from 459 to 476, or an additional 17 g.s.f. per bed.

These square footages do not include space for general department-wide training space. This need is best met with a separate structure.



Mecklenburg County N.C. Detention-Corrections Master Plan

NORTH - Mecklenburg County, NC

3/19/08

Calculation of Additional Square Footage Currently Needed

281,838 gsf existing

459 gross sq. ft./bed

SELECTED SPACE ANALYSIS PER FUNCTIONAL CHECKLIST WORKSHEET DEVELOPED WITH SHERIFF'S PLANNING TEAM:

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
ZONE A, LEVEL 1 - Admissions-Intake					
Sally Port	1,424	1,440	Drive-thru, one door. Already have this, but it could be expanded to handle larger transport vehicles. Specifically, ICE motor coaches are too tall for the sally port doors. Otherwise adequate for buses and vans. The new Youthful offender building possibly blocks expansion.	1,500	1,650
Property Storage	635				
Pharmacy	245		3 rooms - pharmacy, prep., storage		
Medical Supplies	136				
Holding - Counter Area	3,586		3 holding cells, open waiting, enclosed waiting, desk, dress-out, vestibule, toilets		
- Open waiting	160				
- Enclosed waiting	210				
- Admissions desk	689				
ZONE B, LEVEL 1					
Master Control Area		870			
- MC Work Area	307				
- Equipment - MC	129				
Staff Area		7,855	Roll call, lockers, physical condition, servery, dining, classroom, waiting.		
- Male lockers	1,226		142 lockers, 2 toilets, 1 ADA shower, 4 showers, 3 lavs. Short by 4-5 for both male-female.	56	70
- Female Locker	744		62 lockers, 2 lavs, 2 toilets, 2 showers, 1 ADA shower. Short by 4-5 for both male-female.	56	70
- Roll call	674			169	
- Classroom	626				
- Dining/servery	1,498		Larger more comfortable area is needed to handle increased staff	375	430
- Physical conditioning	748				
Staff Training Academy			Replace current facilities. Separate building at North site. Staff need a larger more modern room for this purpose. Computer training, 80-100 occupancy large classroom, 4-5 classrooms at 60 occupancy.	N/A	N/A
Medical Area		3,923	2 exams, 2 dental ops., 1 treatment room		
Visiting - Non-Contact		4,252	25 open stations, 9 enclosed stations (1 ADA); waiting/control		
Family Visit - Contact		1,297	Net; visiting & 2 search		
Lobby		1,149			
Lobby Toilets	700		Men's & women's		
Staff Break			Staff should have a separate room for relaxation apart from staff dining. Current break room is not sufficient; trainees come over too. Needs to be twice as big. Non-smoking outdoor area needed.	2,000	2,300
Administration		4,115	3 offices, mailroom, open office, reception. Already in place: maxed-out now, could use more space. Need mailroom for system with North being the best location. All offices are filled, sheriff's business management needs more space and cubicles (though business management doesn't need to be at North). North administration would fill the space if B.M. moved.		1,030
Shift Command		1,331	5 commander offices, sec'y, toilet, vestibule		
Office		1,791	2 offices, conference, interview, recorder, toilets, storage, open work area.		
- Records	287				
- Conference	322				



Mecklenburg County N.C. Detention-Corrections Master Plan

NORTH - Mecklenburg County, NC

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
LEVEL 1, ZONE C					
Teachers/Clerks (east)		1,069	5 offices, open work area		
Program Core - East		5,638			
Program Offices (east)		594	5 offices, 3 offices, open work area. Need four more offices than are available now.	560	700
Program Core - West		5,980	Adequate for current population, but would do more if had more (2 more classrooms in addition to proposed Vocational classrooms).	1,200	1,380
- Offices (east)		598	3 offices, waiting, storage		
- Classroom nsf	1,064				
- Library nsf	2,017		Stacks, office, media library, media storage		
- Activity Room (nsf)	1,255				
- Arts & Crafts (nsf)	998				
- Activity Room (nsf)	1,230				
- Counseling (nsf)	653		More needed, 1 for every pod is preferred.	880	1,060
- Classroom (nsf)	442				
- Classroom (nsf)	361				
- Classroom (nsf)	382				
- Classroom (nsf)	467				
- Group Counseling	680				
LEVEL 1, ZONE D					
Direct Pod (actual)		9,826	56 beds, 2 attorneys, exercise, staff toilet, laundry		
LEVEL 1, ZONE F					
Laundry		3,360	Mending, mattress-pillow storage, office, break, toilets, janitor closet, washer-dryer area		
Storages:			Need more space. Already have, but more space could be added. Could use 50% more.	1,395	1,600
-Commissary (nsf)	634				
-Jail Clothing (nsf)	634				
-Inactive Records (nsf)	477				
-Uniforms (nsf)	282				
-Forms/Stationary	762				
Maintenance		4,825	Workshop, landscape, lock repair		
LEVEL 1, ZONE F & G					
Kitchen		26,825	NEEDS UNDER REVIEW BY OTHERS		
			10.1 gross sq. ft./bed		
Training		8,550	5 offices, lobby, 2 classrooms, exercise, lockers, dining		
- Large classroom (nsf)	971				
- Small classroom (nsf)	499				
- Exercise (nsf)	1,203				
- Dining/break	581				
Outdoor Exercise			Outdoor exercise area could help inmate management.	4,800	5,280

TOTAL ADDITIONAL GROSS SQ. FT. NEEDED: **10,288**

TOTAL EXISTING GROSS SQ. FT.: **281,838**

REVISED TOTAL GROSS SQ. FT. REFLECTING TODAY'S NEEDS: **292,126**

Beds: **614**

current gross square feet per bed: **459**

gross square feet per bed with additional space: **476**

additional Space per bed: **17**

KIMME & Associates, Inc.



c. Current WRRC Facility Support Space Deficiencies and Needs

The calculation of additional square footage currently needed for the Work Release and Restitution Center (WRRC) appears on the next couple of pages. In this calculation it is estimated that in order for the Work Release and Restitution Center to function effectively given its current demands for program and support space it would need an additional 8,259 g.s.f. This would raise the existing gross square foot total of the WRRC to 79,844 g.s.f. from 71,586 g.s.f. On average that means that the gross square feet per bed provided to the WRRC would increase from 477 to 532, or 55 more g.s.f. per bed than is presently available.



Mecklenburg County N.C. Detention-Corrections Master Plan

WORK RELEASE & RESTITUTION CENTER - Mecklenburg County, NC

3/19/08

Calculation of Additional Square Footage Currently Needed

71,586 gsf existing
477 gross sq. ft./bed

SPACE	NET SF	GROSS SF	REMARKS
GROSS AREA (1st Floor)		16,522	Entry, kitchen, support, Female Housing
GROSS AREA (2nd Level)		14,261	programs, lower tier male housing
GROSS AREA (3rd Level)		13,271	offices, upper tier male housing
GROSS AREA (4th Level)		14,261	offices, lower tier male housing
GROSS AREA (5th Level)		13,271	offices, upper tier male housing
TOTAL BUILDING GSF		71,586	

SELECTED SPACE ANALYSIS PER FUNCTIONAL CHECKLIST WORKSHEET DEVELOPED WITH SHERIFF'S PLANNING TEAM:

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
LEVEL 1					
Dayroom - Female (effective nsf)	403		Calculation deletes circulation; 12.6 sf/bed		
Housing Unit Laundry (nsf)	124		Inmates wash their own clothing and linens; need bigger space, more equipment.	62	75
Supply (nsf)	211		Very Inadequate. Double the current space is needed. Space should be available for supplies and property.	250	300
Maintenance Shop (nsf)	93		While maintenance is available for WRRRC, a parts room on the grounds would improve efficiency.	120	140
Dining (nsf)	2,610		Staff currently use the same dining facility as the inmates; not appropriate.		
Re-Therm Kitchen		1,441	Kitchen, cold storage, office, dry storage. Contract services - Aramark. Full service kitchen for the 150; could do more meals, but probably not 300. Staff meals included, are the same as those eaten by inmates. Aramark staff prepare staff meals.		
- Cold Storage (nsf)	145				
- Dry Storage (nsf)	122				
LEVEL 2					
Housing Unit Laundry (nsf)	171		Inmates wash their own clothing and linens; need bigger space, more equipment.	85	100
Male Housing Area Dayroom	1,388		22 sf/bed excluding stairway		
Classrooms - Small (nsf)	579		2 classrooms; 290 sf each		
Classrooms - Large (nsf)	480				
Classrooms - Large (nsf)	475				
Library (nsf)	539				
- Office (nsf)	119				
- Storage (nsf)	43				
Volunteer Office (nsf)	182				
Sick Call (nsf)	170				
Multi-Purpose (nsf)	1,571		Have multi-purpose room that is sometimes crowded, second multi-purpose may solve. A space for hearings could improve the WRRRC operation. Second multi-purpose room would accommodate. (Storage should be included)	1,100	1,265
- Storage (nsf)	73				
LEVEL 3					
Administrative Office (gsf)		5,189	Inadequate. 3 offices short. Conference too small (21.5 x 16), poorly located (affiliated w/office).	932	1,100
Housing Area Dayroom					
LEVEL 4					
Offices (gsf)		5,189			
Housing Unit Laundry (nsf)	171		Inmates wash their own clothing and linens; need bigger space, more equipment.	85	100
LEVEL 5					
Offices (gsf)		5,189			



Mecklenburg County N.C. Detention-Corrections Master Plan

WORK RELEASE & RESTITUTION CENTER - Mecklenburg County, NC

NEW SPACE NEEDS:

SPACE	NET SF	GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
Sally Port				540	600
Separate Work release Intake (separate male & female)			Entrance is same as public & staff; would like to separate. Inmate Tool room is available.		
- entry/waiting				600	700
- street clothes lockers, clean clothes lockers/checkpoint/showe rs				2,500	2,800
Transport Office-Storage			Need a separate area not visible to other inmates (now in middle of housing).	180	220
Staff Lockers			A training room at WRRRC would be good for staff Non-office Staff should have a place to store personal belongings. 1/2 height lockers. Coats, purses, gym bags.	225	270
Staff Break room			Break room staff uses is too small; needs to accommodate 10- 15. Was to be downstairs. Now eat lunch with inmates, can't get away.	300	360
Staff Dining			staff currently use the same dining facility as the inmates; not appropriate.		
Outdoor Grounds Storage			Use Shed. Should be integrated in building plan. Certain tools and chemicals could be stored outside the building, though.	200	230

TOTAL ADDITIONAL GROSS SQ. FT. NEEDED:	8,259
TOTAL EXISTING GROSS SQ. FT.:	71,586
REVISED TOTAL GROSS SQ. FT. REFLECTING TODAY'S NEEDS:	79,844
Beds:	150
current gross square feet per Bed:	477
gross square feet per bed with additional space:	532
Additional Space per Bed:	55

KIMME & Associates, Inc.

d. Summary of Support Space Deficiencies

A summary of the basic findings in the above tables follows.

SUMMARY: ESTIMATED CURRENT SUPPORT SPACE NEEDS

	CENTRAL	NORTH	WRRRC	TOTALS
TOTAL ADDITIONAL SUPPORT GROSS SQ. FT. NEEDED:	28,029	10,288	8,259	46,576
TOTAL EXISTING GROSS SQ. FT.:	702,884	281,838	71,586	1,056,308
REVISED TOTAL GROSS SQ. FT. REFLECTING CURRENT NEEDS:	730,913	292,126	79,844	1,102,884
TOTAL BEDS:	1,904	614	150	2,668
CURRENT GROSS SQUARE FEET PER BED:	369.2	459.0	477.2	395.9
GROSS SQUARE FEET PER BED W/ADDITIONAL SPACE:	383.9	475.8	532.3	413.4
ADDITIONAL GROSS SQUARE FEET PER BED:	14.7	16.8	55.1	17.5
PERCENTAGE INCREASE (OR PERCENTAGE OF DEFICIENCY):	4.0%	3.7%	11.5%	4.4%

4. Estimating Future Support Space Needs

There are several critical areas of support space that need to be expanded along with additional inmate population and bed capacity. Primary among these areas are intake, food services, laundry, program, and staff space. However, given the magnitude of expanded base capacity involved (2,404 beds) literally all support areas of the jail system will require expansion.



Since the mission of the consultants was to develop a master plan level scope space estimate and not to complete a detailed space program, a more general estimate of support space square footage is needed. To obtain this the consultants calculated square footages at the North and Central facilities.

The consultants did the calculation by establishing the overall square footage of the two buildings and subtracting from it the square footage of existing jail housing pods. Thus, the estimate is not only that of support space but all other gross square footage including that of corridors, elevators, stairways, mechanical space and chases. This figure is then adjusted to account for additional space needs as identified earlier to generate a square foot figure per bed. Those estimates are summarized below:

Non-Housing Support & Gross Area Calculation

NORTH

281,838	Total Existing Building Gross Square Feet
140,361	Housing Gross Square Feet
141,477	NON-Housing GSF
614	Bed Capacity
230	NORTH NON-Housing GSF per Bed

NORTH Support Space Shortages

10,288	Additional Component GSF needed
1.15	General Building Gross Factor
11,831	Additional Gross Square Feet needed
614	Bed Capacity
19	Additional NORTH GSF per Bed

CENTRAL

702,884	Total Existing Building Gross Square Feet
425,883	Housing Gross Square Feet
277,001	NON-Housing GSF
1,904	Bed Capacity
145	CENTRAL NON-Housing GSF per Bed

CENTRAL Support Space Shortages

28,029	Additional Component GSF needed
1.15	General Building Gross Factor
32,233	Additional Gross Square Feet needed
1,904	Bed Capacity
17	Additional CENTRAL GSF per Bed

TOTALS

462,543	Total NON-Housing GSF
2,518	Total Beds
184	TOTAL Non-Housing GSF per Bed

In reality there is a certain amount of core capability in most of the non-housing support spaces. Therefore, for estimating purposes, the consultants have reduced the amount of additional square feet per bed estimated and not made it totally proportionate to bed capacity increases even though the magnitude of those bed increases are significant (Phase 1 nearly doubles existing bed capacity).



Mecklenburg County N.C. Detention-Corrections Master Plan

The recommendation for non-housing gross area per bed in the first Phase is 160 square feet per bed rather than the 184 gross square feet identified above.

The recommendation for non-housing gross area per bed in the second Phase is 150 square feet per bed.

E. TOTAL SPACE NEEDS ESTIMATES – BASE SCENARIO

Based upon the assessment of existing facilities, the information documented in the Function Worksheets, and concepts developed in the Housing Worksheets, the consultants developed gross estimates of total future base space needs.

It is important to note that the square footage estimates developed herein do not constitute a fully developed space program for the purposes of designing an addition(s) to Mecklenburg County facilities. Much detail discussion and work is needed to develop such a program.

The space estimates are more general and were developed for the purpose of generally but more realistically a.) estimating potential facility costs, b.) testing facility option possibilities on potential sites, and c.) developing general comparative estimates of staff and operational costs.

2020 - PRELIMINARY SQUARE FOOT ESTIMATE - PHASE 1; 2,404 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2020; 2,404 beds added, 5,180 Beds total when completed.

Phase 1

4/10/08

BASE

2020

ADDITIONAL HOUSING SQUARE FOOTAGE:

	SQ. FT./Pod	Pods	SQ. FT.
TYPE 1: 50 BED, POD REMOTE DORM		0	0
TYPE 2: 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	14,750	20	295,000
TYPE 3: 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	13,000	0	0
TYPE 4: 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	11,600	4	46,398
TYPE 5: 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	12,800	6	76,800
TYPE 6: 50 BED, DORM, DIRECT (Weekender)	6,400	2	12,800
TYPE 7: 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	3,200	8	25,600
TYPE 8: 40 BED, DORM, DIRECT (Minimum, Vocational)	10,000	10	100,000
SUB-TOTAL HOUSING		50	556,598
HOUSING AREA GROSS FACTOR (miscellaneous gross square feet allowance)			x 1.05
TOTAL ADDITIONAL HOUSING SQUARE FOOTAGE			584,428

ADDITIONAL SUPPORT & GENERAL GROSS SQUARE FOOTAGE:

	SQ. FT. Factor	Beds	
Additional NORTH Square Footage to resolve existing shortages			19,248
Additional CENTRAL Square Footage to resolve existing shortages			28,029
Additional WRRRC Square Footage to resolve existing shortages			8,259
NEW SUPPORT SQUARE FOOTAGE plus BUILDING GROSS SF (corridors, mechanical, etc.):	160	2,404	385,441
TOTAL			440,977
BUILDING GROSS FACTOR (mechanical, structure, shafts, walls, stairs, corridors, miscellaneous)			x 1.00
TOTAL ADDITIONAL SUPPORT SQUARE FOOTAGE			440,977

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 1

	1,025,405
Square Feet per Bed	427



Mecklenburg County N.C. Detention-Corrections Master Plan

PRELIMINARY SQUARE FOOT ESTIMATE - PHASE 2 2,144 NEW BEDS OF HOUSING

Mecklenburg County, NC
Serves needs through 2030; 2,144 new beds added, 7,324 Beds total when completed

Phase 2

4/10/08

BASE

ADDITIONAL HOUSING SQUARE FOOTAGE:

	SQ. FT./Pod		Pods		SQ. FT.
TYPE 1: 50 BED, POD REMOTE DORM		X		=	0
TYPE 2: 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	14,750	X	16	=	236,000
TYPE 3: 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	13,000	X	2	=	26,000
TYPE 4: 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	12,000	X	6	=	72,000
TYPE 5: 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	12,800	X	4	=	51,200
TYPE 6: 50 BED, DORM, DIRECT (Weekender)	6,400	X		=	0
TYPE 7: 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	3,200	X	8	=	25,600
TYPE 8: 40 BED, DORM, DIRECT (Minimum, Vocational)	10,000	X	10	=	100,000
SUB-TOTAL HOUSING					510,800
HOUSING AREA GROSS FACTOR (miscellaneous gross square feet allowance)					x 1.05
TOTAL ADDITIONAL HOUSING SQUARE FOOTAGE					536,340

ADDITIONAL SUPPORT & GENERAL GROSS SQUARE FOOTAGE:

	SQ. FT. Factor	Beds	
Additional NORTH Square Footage to resolve existing shortages			0
Additional CENTRAL Square Footage to resolve existing shortages			0
Additional WRRS Square Footage to resolve existing shortages			0
NEW SUPPORT SQUARE FOOTAGE plus BUILDING GROSS SF (corridors, mechanical, etc.):	150	2,144	321,600
TOTAL			321,600
BUILDING GROSS FACTOR (mechanical, structure, shafts, walls, stairs, corridors, miscellaneous)			x 1.00
TOTAL ADDITIONAL SUPPORT SQUARE FOOTAGE			321,600

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 2 BASE

	857,940
Square Feet per Bed	400

F. COST ANALYSIS – BASE PROJECTED NEEDS

1. Project Schedule

Establishing a preliminary project schedule is critical to cost estimating since it identifies several key milestones that define inflationary factors essential to more accurate cost estimating.

A preliminary facility development schedule appears below. In reviewing the schedule one will note that there are two phases of work. The first phase focuses on programming, designing and constructing just a new addition. The second phase executes renovations within the existing building that were part of the design. At this stage these steps are shown to be sequential. However, depending on the actual design and where it takes place the final schedule later determined by architects, construction managers, and/or design-builders certainly can and will look different, especially in detail.

The preliminary schedule also shows two completion dates for the new addition. Depending upon the design and the location of the addition different construction time frames may apply. For example, a downtown high rise project can be safely assumed to generally take more time than a horizontal type of construction on a larger site.

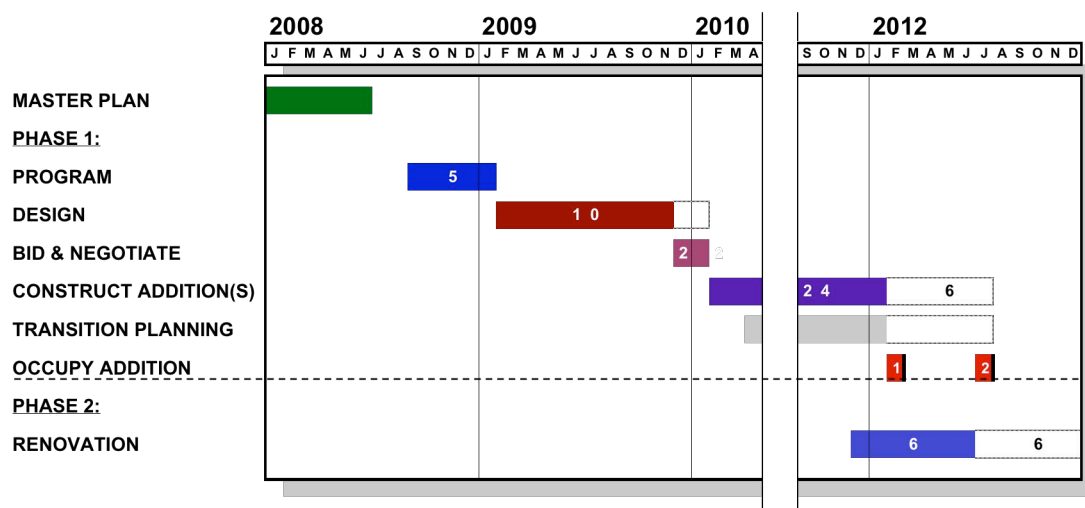
The preliminary schedule gives the reader a general idea of the time frames involved, and the essential steps of the process. It also provides the consultant with some benchmark



time horizons around which general estimates of future project and operational costs can be made.

PRELIMINARY FACILITY DEVELOPMENT SCHEDULE Mecklenburg County, NC Detention

Generic Project



2. Construction and Project Costs and Inflation

Generic, i.e., non-site specific, facility and project cost estimates are based on a variety of elements that are comprehensive but not all inclusive:

- Building construction costs
- Professional fees and services
- Kitchen and laundry equipment costs
- Soils tests and site survey costs
- Furniture, fixture and equipment costs

Not included in the project cost estimates provided herein are costs for site acquisition, building demolition, and particular site features such as tunnels and walkways. These costs could be significant at both the North and Central sites. Also not included in the estimates are construction management fees, costs for professional financial services, or any legal fees incurred during site condemnations or site acquisitions.

Costs, at this point, are generic because their primary purpose is to generate a base against which savings can be calculated as a result of a reduced, or modified, jail population per changes to system policies and practices.

All estimates are based on the assumption that the earliest date that construction bids will be received is January 2010. This date assumes that the county begins the pre-design programming phase no later than September of 2009. A later anticipated bid date would be cause for an inflationary adjustment in estimated costs.



Mecklenburg County N.C. Detention-Corrections Master Plan

The anticipated bid date is important because the consultants have to escalate costs to the point when actual bidding might occur. This is especially important given the 7.7% average annual construction cost inflation experienced with jails over the last three years and the identical 7.7% general construction inflation rate in Charlotte over the last 3 years. The tables below document this history as recorded by R.S. Means.*

JAIL S.F. COST CHANGE - NATIONAL AVG.
(85,000 sf jail and larger)

	% change annual	% change cumulative
1990		
1991	7.4%	7.4%
1992	4.7%	12.5%
1993	7.7%	21.2%
1994	4.6%	26.7%
1995	3.5%	31.1%
1996	3.5%	35.7%
1997	2.5%	39.1%
1998	1.3%	40.9%
1999	4.9%	47.8%
2000	13.0%	67.1%
2001	-9.8%	50.7%
2002	13.4%	70.9%
2003	-7.1%	58.8%
2004	1.5%	61.1%
2005	6.4%	71.5%
2006	6.2%	82.0%
2007	6.4%	93.7%
2008	10.6%	114.1%
2009		

Avg. Change: 4.5%

last 3 yr. avg: **7.7%**

Source: R. S. Means Square Foot Costs 2008

CHARLOTTE, NC CONSTRUCTION COST INDEX
Square Foot Cost Escalation

	Cost Index Charlotte, NC	% change annual	% change cumulative
1990	74.8		
1991	76.0	1.6%	1.6%
1992	77.1	1.4%	3.1%
1993	78.2	1.4%	4.5%
1994	80.3	2.7%	7.4%
1995	81.8	1.9%	9.4%
1996	85.0	3.9%	13.6%
1997	86.8	2.1%	16.0%
1998	88.2	1.6%	17.9%
1999	89.3	1.2%	19.4%
2000	90.3	1.1%	20.7%
2001	91.5	1.3%	22.3%
2002	94.8	3.6%	26.7%
2003	96.2	1.5%	28.6%
2004	98.9	2.8%	32.2%
2005	110.5	11.7%	47.7%
2006	125.1	13.2%	67.2%
2007	132.8	6.2%	77.5%
2008	137.9*	3.8%	84.4%
2009			

Average Change since 1990 3.5%

Avg. last 3 years: **7.7%**

* The national 30 city index average was 173.0

Charlotte's general construction cost escalation experience has been interesting in the past four years, starting with the January 2005 index which increased 11.7% over the preceding year. It then increased 13.2% the next year for a total of 26.5% in two years. Prior to that construction cost inflation, according to Means, had been modest averaging only 2.0% per year since 1990. Since 2006, however, the Charlotte index has risen only 6.2% by the January 2007 index and then another 3.8% by the January 2008 index, a trend in decline.

The table below shows the history of national jail square foot cost escalation since 1983 according to Means. At the bottom of the table is shown escalated national average costs and costs for Charlotte, each making assumptions about inflation three years from now. The three year point is the anticipated mid-point of construction and thus a reasonable point to use as the estimating benchmark.

Please note that to Means costs in Charlotte are considerably less than costs nationwide. The national 30-city index from which the baseline cost estimates are derived is 173.0. The index for Charlotte is 137.9, or 79.7% of the baseline.

* R.S. Means Square Foot Costs, 29th Annual Edition, Copyright © 2007 Reed Construction Data, Inc.



Mecklenburg County N.C. Detention-Corrections Master Plan

JAIL SQ. FT. COSTS - National 30 City Average (85,000 sf jail and larger)

	AVERAGE	LOWEST	HIGHEST
1983	\$84.53	\$45.61	\$127.10
1990	\$103.13	\$63.55	\$162.62
1991	\$110.75	\$91.36	\$167.66
1992	\$115.98	\$93.46	\$171.96
1993	\$124.95	\$87.24	\$179.07
1994	\$130.65	\$87.24	\$179.07
1995	\$135.23	\$90.75	\$186.21
1996	\$139.95	\$90.75	\$207.94
1997	\$143.50	\$93.08	\$213.36
1998	\$145.33	\$94.86	\$217.52
1999	\$152.48	\$96.68	\$221.64
2000	\$172.34	\$102.24	\$256.87
2001	\$155.42	\$104.07	\$276.31
2002	\$176.26	\$107.76	\$176.26
2003	\$163.74	\$111.26	\$295.47
2004	\$166.17	\$113.93	\$302.57
2005	\$176.82	\$127.20	\$337.85
2006	\$187.71	\$135.23	\$359.11
2007	\$199.72	\$143.97	\$382.34
2008	\$220.80	\$161.60	\$429.15
2009			
National 30 city avg:	\$220.80	\$161.60	\$429.15
3 yrs @7.7% =	\$275.86	\$201.90	\$536.16
Adjusted for Charlotte:	\$176.00	\$128.81	\$342.08
3 yrs @7.7% =	\$220.09	\$161.08	\$427.77

Location:	Location Index:	Year:
CHARLOTTE	137.9	2008

30 city average 2008: 173.0

For the purpose of Mecklenburg County jail expansion cost estimates the consultants have used an estimated generic (non-site specific) square foot cost of \$275 in 2008 dollars. It was then escalated three years at 7.0%, which would add 22.5% total, and take the county to the mid-point of construction for the anticipated Phase 1 project. Roughly speaking, new construction then is generically estimated at \$337 per square foot. Applying a $\pm 10\%$ range given the very early stage of the work results in estimated square foot costs of from \$303/s.f. to \$371/s.f.

For Phase 2, the construction inflation rate was assumed to have dropped into a lower range between the recent past's extraordinarily high rates (2005-2008) and the far more modest rates of the more distant past (1990-2004). The annual inflation rate used for the time period after 2011 was 4.5%. This led to a year 2020 per square foot cost of \$501.

All construction and project costs were turned into an annual average financing cost so that the costs of construction could be annualized and added to anticipated annual operating costs for the purpose of doing a comprehensive life cycle cost analysis. For this study an average annual interest rate of 5.0% on borrowed monies was assumed, per advice from county financial staff. The recommended payment timeframe was 20 years.

Below is the generic construction and project cost estimates for the Base Phase 1 project. Project costs do not include the costs of site acquisition, demolition of existing buildings on site, construction managers, financing, or legal services. They do include a factor meant to account for architectural and engineering fees, furniture, and miscellaneous costs such as site surveys, soils tests, and drawing reproduction.



Mecklenburg County N.C. Detention-Corrections Master Plan

2020 - GENERIC PROJECT COST ESTIMATE - PHASE 1; 2,404 NEW BEDS OF HOUSING + SUPPORT PHASE 1

Mecklenburg County, NC

4/10/08

Serves needs through 2020; 2,404 beds added, 5,180 Beds total when completed (including the Youthful Offender addition).

**BASE
2020**

CURRENT DOLLARS (2008):

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 1 BASE	1,025,405
Square Feet per Bed	427
GRAND TOTAL CURRENT DOLLARS (2008) CONSTRUCTION COST ESTIMATE - PHASE 1 BASE	
Dollars per Square Foot (2008 dollars):	\$275/sq. ft.
Estimated Construction Cost:	\$281,986,487
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$253,787,838
Cost per Square Foot, LOW:	\$248/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$310,185,136
Cost per Square Foot, HIGH:	\$303/sf
GRAND TOTAL CURRENT DOLLARS (2008) PROJECT COST ESTIMATE - PHASE 1 BASE	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$324,284,460
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$291,856,014
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$356,712,906

INFLATED DOLLARS (2011):

GRAND TOTAL INFLATED (2011) CONSTRUCTION COST ESTIMATE - PHASE 1 BASE	
Annual Construction Inflation Factor (2008-2011):	1.070
Years of Inflation until mid-point of construction (2011):	3
Total Multi-year Inflation Factor:	1.225
Inflated Dollars per Square Foot (2011 dollars):	\$337/sq. ft.
Estimated Construction Cost:	\$345,445,572
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$310,901,015
Inflated Cost per Square Foot, LOW:	\$303/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$379,990,129
Inflated Cost per Square Foot, HIGH:	\$371/sf
GRAND TOTAL INFLATED (2011) PROJECT COST ESTIMATE - PHASE 1 BASE	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$397,262,408
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$357,536,167
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$436,988,648

In summary, the consultants estimate a construction cost in current 2008 dollars of from \$254 million to \$310 million and project costs of from \$290 million to \$356 million for Phase 1. Year 2008 figures are used to allow more readily understood comparisons to both year 2020 Phase 2 project cost estimates and the cost estimates later produced for the "modified" project which come later after the inmate population impact of criminal justice system changes is calculated.

Assuming three years until the mid-point of construction (2011), the inflated, or actual, generic construction cost estimate for the Base Phase 1 project is \$310 million to \$380 million based on a square foot cost of from \$303 to \$371 that is inflated by 22.5% from 2008 figures.

The inflated project cost estimate for the Base Phase 1 project is from \$357 million to \$437 million.

The construction and project cost estimates for the Base Phase 2 project are as follows.



Mecklenburg County N.C. Detention-Corrections Master Plan

2030 - PROJECT COST ESTIMATE - PHASE 2: 2,144 NEW BEDS OF HOUSING + SUPPORT

Mecklenburg County, NC

Serves needs through 2030; 2,144 beds added, 7,324 Beds total when completed (including the Youthful Offender addition).

PHASE 2

6/28/08

BASE

2030

CURRENT DOLLARS (2008):

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 2 BASE	857,940
Square Feet per Bed	400
GRAND TOTAL CURRENT DOLLARS (2008) CONSTRUCTION COST ESTIMATE - PHASE 2 BASE	
Dollars per Square Foot (2008 dollars):	\$275/sf
Estimated Construction Cost:	\$235,933,487
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$212,340,138
Cost per Square Foot, LOW:	\$248/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$259,526,835
Cost per Square Foot, HIGH:	\$303/sf
GRAND TOTAL CURRENT DOLLARS (2008) PROJECT COST ESTIMATE - PHASE 2 BASE	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$271,323,510
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$244,191,159
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$298,455,861

INFLATED DOLLARS (2020):

GRAND TOTAL INFLATED (2020) CONSTRUCTION COST ESTIMATE - PHASE 2 BASE	
Annual Construction Inflation Factor (2008-2011):	1.070
Years of Inflation until mid-point of construction (2011):	3
Total Multi-year Inflation Factor:	1.225
Inflated Dollars per Square Foot (2011 dollars):	\$337/sf
Annual Construction Inflation Factor (2011-2020):	1.045
Years of Inflation from 2011 until mid-point of construction (2020):	9
Total Multi-year Inflation Factor:	1.486
Inflated Dollars per Square Foot (2020 dollars):	\$501/sf
Estimated Construction Cost:	\$429,524,097
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$386,571,687
Inflated Cost per Square Foot, LOW:	\$451/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$472,476,506
Inflated Cost per Square Foot, HIGH:	\$551/sf
GRAND TOTAL INFLATED (2020) PROJECT COST ESTIMATE - PHASE 2 BASE	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$493,952,711
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$444,557,440
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$543,347,982

For Phase 2, the consultants estimate a construction cost in current 2008 dollars of from \$212 million to \$260 million and project costs of from \$244 million to \$298 million.

Assuming three years until the mid-point of construction (2011), the inflated, or actual, generic construction cost estimate for the Base Phase 2 project is \$386 million to \$472 million based on a square foot cost of from \$303 to \$371.

The inflated project cost estimate for the Base Phase 1 project is from \$444 million to \$543 million.



a. Staffing and Operational Costs Estimates and Methodology

Many people persuasively argue that the most significant cost of a jail is the annual cost of staff. Because the costs of staff are high and are also fundamental to facility safety, security and liability reduction, it is often one of the most important issues to contend with during facility planning.

Insofar as the proposed facility addition is concerned, the consultants *estimate a staff level that insures adequate numbers of security staff doing the right things at the right time to insure inmate safety and security and to reduce county liability.* The consultants also recommend a staffing level that provides sufficient administrative and supervisory oversight over the basic security staff of the facility. The consultants further recommend staffing that recognizes that the direct supervision and podular remote style of housing proposed to achieve greater levels of inmate-staff safety and security, requires a constant commitment of staffing to those housing areas.

Regarding staffing estimates, the consultants tried to follow an approach that was more detailed than simply a pro-rated staff increase based on additional inmate population. While the consultants were not in the position to do a post-by-post estimate of staffing **without a program or a design** they still wanted to undertake a process that would result in a better estimate of costs than derived from only pro-rating. Thus, staff estimates also were the product of a more detailed process per the outline below:

1. Identify precisely the housing pod types needed and the exact pattern of staffing for those housing pods.
2. Identify the staff for various other components and estimate their growth as a ratio to either projected average daily population increases or projected intake processing increases, as appropriate.
3. Identify the annual staff and operating costs for various non-housing components and calculate increases based on anticipated growth in either ADP or intakes.

Following is a discussion of the variables considered in estimating future facility expansion staffing needs absent completion of the **functional programming** and schematic design phases.



b. Shift Relief Factor a/k/a Net Annual Work Hours (NAWH) Used

The calculation of an accurate shift relief factor is absolutely essential to the proper staffing of a jail facility. The Shift Relief Factor (SRF/NAWH) is the figure used to determine the number of personnel necessary to fill a post. Any post/position that must be filled when the person assigned to that position is not working (days off, sick days, vacation, training, etc.) requires additional staff to fill-in. The number of staff required to fill-in is determined by calculating the **net annual hours worked (NAWH)** or a shift relief factor.

Mecklenburg County uses the NAWH method for determining full post coverage. It is essential that those reviewing and approving the budget for the jail staffing know and understand the full implications of the Shift Relief Factor (SRF/NAWH). All too often, there is concern for the fact that the total number of personnel is very large in comparison to the inmate average daily population. It must be remembered that an inmate is in jail 24 hours a day, seven days a week. **To staff a single post or position in the proposed facility addition for 24 hours each day, seven days a week in Mecklenburg County will require about 5 staff.**

The Shift Relief Factor (SRF/NAWH) is a factor which is applied to each post and position in the facility which must be covered to compensate for around-the-clock operation, days off, vacation days, holidays, sick days, mandatory training and other unavailable days related to funerals, military service, etc.

Mecklenburg County (1995) has calculated the following Net Annual Work Hours (NAWH) for various facilities and work groups (see attached worksheet):

Net Annual Work Hours – Mecklenburg County (1995)

Detention Officers Central	1743
Detention Officers North	1750
Detention Officers Classification	1803
Sergeants	1692
Civilians	1913

For purposes of estimating future facility addition staffing needs, K&A has **utilized the Jail Central Detention Officer NAWH of 1743.**



Mecklenburg County N.C. Detention-Corrections Master Plan

NAHW 2005

	D/O- Central	D/O- North	Job Classifications D/O- Classification	D/S- APD	Civilian
Steps					
1. Total hours contracted per employee per year (if a regular workweek is 40 hours, then 40 x 52.14 weeks = 2,086)	2236	2236	2236	2236	2085
2. Average number of vacation hours per employee per year	80	80	80	80	40
3. Average number of compensatory hours off per employee per year	12	12	8	12	0
4. Average number of sick leave hours off per employee per year	32	24	33	24	28
5. Average number of training hours off per employee per year	40	40	40	80	24
6. Average number of personal hours off per employee per year	12	8	12	8	0
7. Average number of military hours off per employee per year	57	62	0	80	0
8. Average number of break hours off per employee year (optional; it may be a contractual item)	180	180	180	180	0
9. Holidays	80	80	80	80	80
10. Other (specify)					
11. Other (specify)					
12. Other (specify)					
13. Total hours off per employee per year (total lines 2 through 12)	493	486	433	544	172
14. Net annual work hours (subtract line 13 from 1)	1743	1750	1803	1692	1913



c. Staff Estimates Based on Exact Staff Numbers

Shift Supervisors/Sergeants

K&A utilized the Mecklenburg County Active Budget Positions (2007) to develop a ratio of Sergeants/Supervisors to DO'S. With the exception of Work Release, **current** system wide data was analyzed which included the following:

Commanders	1
Sheriff's Major and Detention	3
Sheriff's Captains	31
Sergeants (DO/Deputy)	65
Det. Officers and Det. Deputies	703
TOTAL (exclusive of Work Release)	803

A **ratio** of Sergeants to Detention Officers of **1 (Sergeant) to 10.8 (Det. Officers)** was calculated and applied to future staffing estimates.

Movement/Escort Officers

K&A utilized data from Central and North to develop a ratio of movement/escort officers to Pod Detention Officers. This ratio, **1 movement/escort officer per 2.2 Pod Detention Officers** was approximated at 1 to 2 pods to estimate future staffing needs for this position.

The Jail Central ratio was **1 to 1.6** (See attached graphic) and the Jail North ratio was **1 to 2.8** (Escort to pod officers). Jail North has 90.34 pod/other security officers and 32.0 Escort Officers.

CENTRAL (Pods 1700 to 6500) [DO To Movement Officer Ratio]

CENTRAL		
<u>Pods</u>	<u>Pod Officers</u>	<u>Movement Officers</u>
1700-1900	33	20
2200-2700 (Includes MC)	62	25
3100-3900	55	30
4100-4900	45	30
5100-5900	40	30
6100-6900	35	30
	270	165



Ratio of Movement officers to Pod officers is **1 to 1.6** (at Central Jail).

NORTH

Ratio of Pod officers/Other Security DO's to **Escort** Officers

90.34 Pod/Other Security Officers

32.0 Escort Officers

Escort to Pod Officer Ratio is **1 to 2.8**

Pod Officers

The estimated need for additional pod officers was based on the current Mecklenburg County practice of one (1) pod officer per pod/unit on a 24/7 basis (Once a pod becomes overcrowded, additional staff are allocated to the pod. This variable was not included in forecasting the new facility addition). Therefore, a simple calculation of pod officer need was based on the need for 5 officers per additional pod (24/7/365), which includes the shift relief factor and NAWH calculation. Since the actual need for new pods was identified this staff number could be calculated with a fair degree of accuracy.

Others

Growth in the following categories of staffing were estimated based upon existing numbers actually assigned to these posts, their perceived adequacy, and the need for additional staff once facilities were expanded:

- Master Control
- Visitation - Lobby
- Work Crew
- Field Training Officers
- Kitchen Security
- Clinic-Hospital Security
- WRRRC Coordinator
- WRRRC Unit Manager
- WRRRC Case Manager

d. Staff Cost Estimates Based on Ratios of ADP or Intakes

There were several categories of staffing where staff estimates were not made but estimates in staff costs were. The growth in staff costs was tied to growth in either ADP or intakes. This inherently assumed that staffing in these categories was acceptable. For these categories, the consultants had budget numbers for staff in the various functional components that were used in the extrapolations.



The categories of staffing where estimates based on ADP growth were used are listed below. Further, in some of these categories the figures were for areas not entirely devoted to detention. Based on data supplied by the Sheriff's Office, the staff costs were further pro-rated accordingly. The percentage of staff costs used is parenthetically noted after the staffing component.

- Classifications - Records - Release - Staging
- Transport
- Training (74%)
- Personnel-Recruiting (76%)
- Finance/Business Management (76%)
- Information Services (76%)
- Programs

The categories of staffing for which growth in intakes guided the estimate are as follows.

- Arrest Processing
- Pretrial Services
- Inmate Finance - Property

e. Staff Cost Tables

When calculating operating costs the factor which increases current operating budgets the most is clearly the additional staffing proposed. Revenues from increased bed renting to federal, state, or local governments could off-set significant portions of the increase in operational costs required to run a larger facility. Such increased operational costs are not only for staffing but for more meals, more medical care, and the heating and cooling of a much larger building, among other things. No calculation has been made for the possible impact of increased rentals

After doing considerable work with the sheriff's staff on estimated staffing needs and reviewing existing budget materials the consultants can summarize the staff cost findings for the first year of operations by the figures presented below. All costs are in current dollars and represent just the increase in staff costs from the 2007 budget. The 2007 budget for all detention-corrections staff was about \$59,360,000. This includes jail staff and appropriate portions of general Sheriff's Office-wide components like training, information systems and business management and

The tables below calculate staff costs for a 2012 opening, a 2020, and 2030. The costs are derived from either actual estimates of staff needed when that can be calculated (housing pod staff) or from extrapolations of existing staff costs. The latter is driven by either projected increases in ADP or intakes as described above.



In summary, staff costs are projected to be as follows, all in current dollars.

Annual Base Staffing Cost Increases (Rounded)

At opening, 2012:	+ \$8,800,000
In 2020:	+ \$35,400,000 (inclusive of 2012)
In 2030:	+ \$39,100,000 (in addition to 2020)
2020 and 2030 combined:	+ \$74,500,000



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections
NEW STAFF @ OPENING 2012

BASE GENERIC NEEDS
2012
4/9/08

471 MORE ADP than 2007 RATIOS USED 2020/2007: ADP = 3142/2671; INTAKES = 48101/43994

	Salary	multiplier	FTE	Total Cost per Position	Notes:
1					
2	ADMIN-CENTRAL, NORTH, WRRRC			\$549,785	A ratio of existing costs to growth in projected ADP (3142/2671).
3					
4					
5					
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	7.8	
7					
8					
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00		
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	30.1	
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00	10.0	
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00	10.0	
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00	5.0	
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00	5.0	
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00	10.0	
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00		
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	35.1	
18					
19	ARREST PROCESSING			\$179,424	A ratio of existing costs to growth in projected Intakes using 1999-2007 data (48101/43,994).
20	PRETRIAL			\$140,520	
21	CLASSIFICATION-RECORDS-RELEASE-STAGING			\$544,532	
22	INMATE FINANCE-PROPERTY			\$147,713	
23	FACILITY DEVELOPMENT				
24	TRANSPORT			\$161,652	A ratio of existing costs to growth in projected ADP (3142/2671).
25	TRAINING			\$152,972	
26	PERSONNEL-RECRUITING			\$79,403	
27	FINANCE/BUSINESS MANAGEMENT			\$67,088	
28	INFORMATION SERVICES			\$63,172	
29	PROGRAMS (Central-North)			\$250,016	A ratio of existing costs to growth in projected ADP (3142/2671).
30	MASTER CONTROL	\$46,485	1.00	5.0	
31	VISITATION-LOBBY	\$46,485	1.00	3.3	
32	WORK CREW	\$46,485	1.00	2.1	
33	FIELD TRAINING OFFICERS	\$46,485	1.00	5.0	
34	KITCHEN SECURITY	\$46,485	1.00		
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00	5.0	
36	WRRRC COORDINATOR	\$46,485	1.00		
37	WRRRC UNIT MANAGER	\$81,758	1.00		
38	WRRRC CASE MANAGER	\$46,485	1.00		
39					
40					
41					
42					
SUB-TOTAL				\$8,821,844	



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections
NEW STAFF @ FULL OCCUPANCY 2020

Note: Detention Officer rates are used rather than deputy sheriff

BASE GENERIC NEEDS
2020

4/9/08 70% ADP increase

1872 MORE ADP than 2007 RATIOS USED 2020/2007: ADP = 4543/2671; INTAKES = 58327/43994

	Salary- Fringe	multiplier	FTE	Total Cost per Position	Notes:
1					
2	ADMIN-CENTRAL, NORTH, WRRC			\$2,185,134	A ratio of existing costs to growth in projected ADP (4543/2671).
3					
4					
5					
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	30.0	
7					
8					
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00		
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	100.3	
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00		
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00	40.1	
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00	30.1	
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00	10.0	
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00	20.1	
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00	50.1	
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	135.4	
18					
19	ARREST PROCESSING			\$2,354,828	A ratio of existing costs to growth in projected Intakes using 1999-2007 data (58,327/43,994). A ratio of existing costs to growth in projected Intakes using 1999-2007 data (58,327/43,994). A ratio of existing costs to growth in projected ADP (4543/2671).
20	PRETRIAL			\$490,400	
21	CLASSIFICATION-RECORDS-RELEASE-STAGING			\$2,164,253	
22	INMATE FINANCE-PROPERTY			\$515,503	
23	FACILITY DEVELOPMENT			\$505,595	
24	TRANSPORT			\$642,488	A ratio of existing costs to growth in projected ADP (4543/2671). 74% of training costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (4543/2671). 76% of personnel-recruiting costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (4543/2671). 76% of business management (finance) costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (4543/2671). 76% of Info Services costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (4543/2671). A ratio of existing costs to growth in projected ADP (4543/2671).
25	TRAINING			\$607,990	
26	PERSONNEL-RECRUITING			\$315,590	
27	FINANCE/BUSINESS MANAGEMENT			\$266,643	
28	INFORMATION SERVICES			\$251,078	
29	PROGRAMS (Central-North)			\$993,694	5 officers at North, 19 at Central
30	MASTER CONTROL	\$46,485	1.00	25.1	
31	VISITATION-LOBBY	\$46,485	1.00	16.7	
32	WORK CREW	\$46,485	1.00	4.2	
33	FIELD TRAINING OFFICERS	\$46,485	1.00	15.0	
34	KITCHEN SECURITY	\$46,485	1.00	3.3	
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00	10.0	
36	WRRC COORDINATOR	\$46,485	1.00	1.1	
37	WRRC UNIT MANAGER	\$81,758	1.00	1.1	
38	WRRC CASE MANAGER	\$46,485	1.00	2.2	
39					
40	OVERTIME				
41					
42					
				\$35,390,987	



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections

NEW STAFF @ FULL OCCUPANCY - 2030

BASE GENERIC NEEDS
2030

4/9/08 46% ADP increase

2082 MORE ADP RATIOS USED 2030/2020 against 2020 totals: ADP =
than 2020 6625/4543; INTAKES = 72258/58327

		Salary	multiplier	FTE	Total Cost per Position	Notes:
1						
2	ADMIN-CENTRAL, NORTH, WRRC				\$2,430,261	A ratio of existing costs to growth in projected ADP (6625-4543)/2671.
3						
4						
5						
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	28.9	\$2,359,624	
7						
8						
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00			
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	80.2	\$3,729,239	
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00	10.0	\$466,155	
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00	60.2	\$2,796,929	
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00	20.1	\$932,310	
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00			
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00	20.1	\$932,310	
16						
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00	50.1	\$2,330,774	
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	130.4	\$6,060,013	
18						
19	ARREST PROCESSING				\$3,034,454	A ratio of existing costs to growth in projected Intakes using 1999-2007 data ((72258-58327)/43994).
20	PRETRIAL				\$631,935	A ratio of existing costs to growth in projected Intakes using 1999-2007 data ((72258-58327)/43994).
21	CLASSIFICATION-RECORDS-RELEASE-STAGING				\$4,094,038	A ratio of existing costs to growth in projected ADP (6625-4543)/2671.
22	INMATE FINANCE-PROPERTY				\$664,282	A ratio of existing costs to growth in projected Intakes using 1999-2007 data ((72258-58327)/43994).
23	FACILITY DEVELOPMENT				\$471,371	
24	TRANSPORT				\$1,215,370	A ratio of existing costs to growth in projected ADP (6625-4543)/2671.
25	TRAINING				\$1,387,693	74% of training costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (6625-4543)/2671.
26	PERSONNEL-RECRUITING				\$707,829	76% of personnel-recruiting costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (6625-4543)/2671.
27	FINANCE/BUSINESS MANAGEMENT				\$598,047	76% of business management (finance) costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (6625-4543)/2671.
28	INFORMATION SERVICES				\$563,137	76% of Info Services costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (6625-4543)/2671.
29	PROGRAMS (Central-North)					
30	MASTER CONTROL	\$46,485	1.00	25.1	\$1,165,387	
31	VISITATION-LOBBY	\$46,485	1.00	16.7	\$776,925	
32	WORK CREW	\$46,485	1.00	4.2	\$194,231	
33	FIELD TRAINING OFFICERS	\$46,485	1.00	15.0	\$699,232	
34	KITCHEN SECURITY	\$46,485	1.00	3.3	\$155,385	
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00	10.0	\$466,155	
36	WRRC COORDINATOR	\$46,485	1.00	1.1	\$50,679	
37	WRRC UNIT MANAGER	\$81,758	1.00	1.1	\$89,135	
38	WRRC CASE MANAGER	\$46,485	1.00	2.2	\$101,358	
39						
40						
41						
42						
				478.6	\$39,104,260	

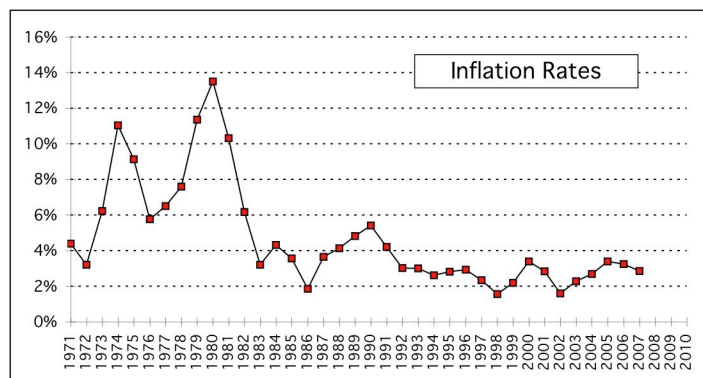


G. LIFE CYCLE COSTS – BASE PROJECTED NEEDS

All of the Base facility and operational cost data was collected and combined into life cycle cost analysis worksheets. These worksheets were created to estimate the total long-term costs involved in operating larger facilities to meet projected jail population increases from 2012, the anticipated year during which new facilities would open, through 2030.

The operational and staffing cost calculations used in the life cycle analysis added the cost of new staff, additional inmate-related operational costs, and increased utility costs to existing 2007 totals to create a total operational cost for the system. Capital financing cost and calculations used in the analysis were only for costs associated with new construction. Any capital financing costs related to the existing facilities, the new Youthful Offender addition to North, or the new Sprung structures addition to North were not included since the goal was to measure the cost impact of the new facilities suggested by the Base projections.

While the cost of financing construction is relatively fixed just like a home mortgage tends to be, operational costs including staffing are subject to inflationary pressures. That is, they rise over time in way in which building financing costs do not. For example, in the past three years the consumer price index (CPI) has increased at an average rate of 2.9% per year, or 9.8% total with 2007's rate being 2.8%. To account for inflation in their life cycle calculations, the consultants applied a 3.0% inflation rate annually to projected operational and staff costs. A table of annual CPI cost increases since 1971 appears below for reader reference.



In addition, operational costs also rise every year as the jail population rises, even if there is no inflation. Therefore, non-staff operational costs were tied to projected increases in jail population over time as well as to inflation. This created a compounding of operational costs truly reflective of how actual costs rise.

Staff costs also increased over time in excess of inflation because it was assumed that jail staff numbers would grow as jail population grew and new housing pods opened. Thus, the Base cost of staffing in 2030 was much higher than the Base cost of staffing in 2008 even with inflationary cost considerations.



Mecklenburg County N.C. Detention-Corrections Master Plan

Non-staffing related inmate costs were derived from budget data provided by the Sheriff's Office. These costs were then reduced to a cost per inmate per day that could be multiplied by projected ADP. This figure was also compounded by an annual 3% inflation rate.

Costs for utilities were derived from the amount per square foot currently paid by the county increased by the estimated amount of new square footage created in Phases 1 and 2. Further, utilities costs were inflated at 3% per year.

Facility financing costs actually overlap starting in 2020 with both Phase 1 and Phase 2 costs being paid from 2020 forward through 2030.

Below are tables documenting the life cycle calculations for the Base option, starting first with the operational life cycle cost calculation, and second with the total life cycle cost calculation. This second table combines annual operational costs and financed capital costs for a total life cycle cost summary. Regarding the second table, no calculations have been made with respect to lost tax revenue as a result of buying additional property for a project, and no assumption has been made regarding the prospect of additional revenues from housing federal, state, or local inmates. Offsets from rentals are certainly a strong possibility in the early years of the new facilities when surplus bed capacity should be available.

MECKLENBURG CO, NC

GENERIC NEEDS

BASE, UN-MODIFIED OPERATIONS LIFE CYCLE COSTS

4/7/08

BASE

ASSUME Inflation Factor of:		1.03	\$2,174,583 = 2008-09 Utility Costs		1,025,405 sf = new thru 2020		2007 jail salaries:	
			857,940 sf = new thru 2030		\$59,357,233			
			Cost/SF/Yr:					
YEAR	BASE Projected Avg Daily Population	\$18.40 Misc. Oper. Costs with Inflation*	\$2.05 Utilities Costs with Inflation	Court Trans (Staff costs in E.) (Ops Costs in B.)	Jail, jail-related Personnel Costs with Inflation	\$0 Contract Costs with Inflation (in misc. oper. costs)	OPERATIONS TOTAL Annual Cost	
	A	B	C	D	E	F	G	
2008	2,569							
2009	2,705					\$0		
2010	2,845					\$0		
2011	2,991			\$0		\$0		
2012	3,142	\$23,234,947	\$4,470,216	\$0	\$79,038,236	\$0	\$106,743,400	
2013	3,299	\$24,797,205	\$4,604,323	\$0	\$86,551,076	\$0	\$115,952,603	
2014	3,461	\$26,438,066	\$4,742,453	\$0	\$94,063,916	\$0	\$125,244,435	
2015	3,629	\$28,167,183	\$4,884,726	\$0	\$101,576,756	\$0	\$134,628,665	
2016	3,803	\$29,986,767	\$5,031,268	\$0	\$109,089,595	\$0	\$144,107,630	
2017	3,982	\$31,890,964	\$5,182,206	\$0	\$116,602,435	\$0	\$153,675,605	
2018	4,164	\$33,865,230	\$5,337,672	\$0	\$124,115,275	\$0	\$163,318,177	
2019	4,352	\$35,935,233	\$5,497,802	\$0	\$131,628,115	\$0	\$173,061,151	
2020	4,543	\$38,077,758	\$8,095,846	\$0	\$139,140,955	\$0	\$185,314,558	
2021	4,738	\$40,302,019	\$10,997,446	\$0	\$151,643,804	\$0	\$202,943,268	
2022	4,937	\$42,608,989	\$11,327,369	\$0	\$164,146,653	\$0	\$218,083,011	
2023	5,139	\$44,990,764	\$11,667,190	\$0	\$176,649,502	\$0	\$233,307,456	
2024	5,344	\$47,447,686	\$12,017,206	\$0	\$189,152,352	\$0	\$248,617,244	
2025	5,552	\$49,979,954	\$12,377,722	\$0	\$201,655,201	\$0	\$264,012,876	
2026	5,763	\$52,587,603	\$12,749,053	\$0	\$214,158,050	\$0	\$279,494,707	
2027	5,976	\$55,261,251	\$13,131,525	\$0	\$226,660,899	\$0	\$295,053,676	
2028	6,191	\$58,000,211	\$13,525,471	\$0	\$239,163,749	\$0	\$310,689,430	
2029	6,407	\$60,794,106	\$13,931,235	\$0	\$251,666,598	\$0	\$326,391,939	
2030	6,625	\$63,651,089	\$14,349,172	\$0	\$264,169,447	\$0	\$342,169,709	
Totals		\$788,017,026	\$173,919,901	\$0	\$3,060,872,614	\$0	\$4,022,809,541	
		19.6%	4.3%	0.0%	76.1%	0.0%		

* from 2007 budget; excludes salaries, fringes, utilities, electronic monitoring costs; includes Food & Med contracts.



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC

GENERIC NEEDS

BASE, UNMODIFIED TOTAL LIFE CYCLE COSTS SUMMARY

4/7/08

BASE

Inflation Factor: **1.03**

YEAR	OPERATIONS Total Annual Cost H	LOST CO. TAX Rev. with Inflation I	Net Savings from Per Diems J	Interest 5.00% CONSTRUCTION/ PROJECT Annual Payment Two Phases K	TOTAL ANNUAL EXPENSE O
2008					
2009					
2010					
2011					
2012	\$106,743,400	\$0	(\$0)	\$31,877,363	\$138,620,763
2013	\$115,952,603	\$0	(\$0)	\$31,877,363	\$147,829,967
2014	\$125,244,435	\$0	(\$0)	\$31,877,363	\$157,121,798
2015	\$134,628,665	\$0	(\$0)	\$31,877,363	\$166,506,029
2016	\$144,107,630	\$0	(\$0)	\$31,877,363	\$175,984,993
2017	\$153,675,605	\$0	(\$0)	\$31,877,363	\$185,552,969
2018	\$163,318,177	\$0	(\$0)	\$31,877,363	\$195,195,541
2019	\$173,061,151	\$0	(\$0)	\$31,877,363	\$204,938,514
2020	\$185,314,558	\$0	(\$0)	\$71,513,407	\$256,827,965
2021	\$202,943,268	\$0	(\$0)	\$71,513,407	\$274,456,675
2022	\$218,083,011	\$0	(\$0)	\$71,513,407	\$289,596,418
2023	\$233,307,456	\$0	(\$0)	\$71,513,407	\$304,820,863
2024	\$248,617,244	\$0	(\$0)	\$71,513,407	\$320,130,651
2025	\$264,012,876	\$0	(\$0)	\$71,513,407	\$335,526,283
2026	\$279,494,707	\$0	(\$0)	\$71,513,407	\$351,008,114
2027	\$295,053,676	\$0	(\$0)	\$71,513,407	\$366,567,083
2028	\$310,689,430	\$0	(\$0)	\$71,513,407	\$382,202,837
2029	\$326,391,939	\$0	(\$0)	\$71,513,407	\$397,905,346
2030	\$342,169,709	\$0	(\$0)	\$71,513,407	\$413,683,116
Totals	\$4,022,809,541	\$0	(\$0)	\$1,041,666,383	\$5,064,475,923
	79.4%	0.00%	(0.0%)	20.6%	

In summary, it is projected that the life cycle cost of operating a system driven by Base projected ADP and capacity needs would be \$5,064,000,000 over a 19 year period starting in 2012 and ending in 2030. The first year would require \$138,620,000 in total expenditures and the last year \$413,680,000. The staff and operational costs of the system would represent 79.4% of the total costs and the capital expenditures 20.6%.



IV. RECOMMENDED APPROACHES TO MANAGING JAIL POPULATION SIZE

The Kimme & Associates team, including LPA and JMI, developed criminal justice policy change recommendations based on the following broad goals that characterize well-functioning county criminal justice systems:

- Protecting public safety while using the least restrictive supervision options necessary.
- Responding to the needs and concerns of crime victims and community residents.
- Ensuring fair and effective adjudicatory processes.
- Enabling efficient use of available resources.
- Promoting effective use of modern communications and information technology.
- Providing high-quality equipment and facilities.
- Supporting an adequate work force of competent and well-trained personnel.

The two factors that control jail population size are the number of admissions to jail and the average length of stay of jail inmates. County criminal justice systems that collaborate to ensure that only those individuals who must be jailed either to protect the public or ensure their appearance at court are housed in the jail system, and that the cases of these individuals are processed as efficiently as possible, can successfully manage their jail population size.

Kimme & Associates team members interviewed and met with a wide variety of local and state policymakers and practitioners in the early stages of our work. We also reviewed and analyzed historic data on the jail population developed by the Sheriff's Office and examined information on court case processing policies, practices and trends. Based on the information we obtained and on our extensive national experience in jail population management strategies, we concluded that Mecklenburg County policymakers can best manage jail population through a combination of approaches that reduce the volume of admissions / bookings and shorten average stays of those inmates detained awaiting disposition/sentencing. These recommended approaches apply only to those arrestees and inmates with state, not federal, charges; the federal criminal justice system was not the subject of Kimme & Associates information-gathering or analysis.

In response to our findings and with the assistance of a technical assistance team from American University, the Mecklenburg Practitioners Work Group (MPWG) has developed strategies for implementing many of the Kimme team's recommendations. The estimated impacts of their strategies on jail population are summarized in Chapter V. ***The consultant team strongly believes that the estimated 19.8% reduction in jail ADP is the minimum that could be achieved should our recommendations be fully and aggressively implemented, and we therefore hope that the County will continue to challenge and support justice system practitioners in their efforts to reduce jail admissions and shorten average lengths of stay.***



A. REDUCING THE VOLUME OF ADMISSIONS/BOOKINGS

In Mecklenburg County, arrestees are brought to the Arrest Processing Center (APC) for identification, appearance before a magistrate, bail-setting and screening for other types of pretrial release. Individuals not released via bail or other means within the first 8 hours after arrest are booked into the jail facility system. In this document, admission refers to entry into the APC, and booking refers to being housed in jail.

The Kimme team recommends that Mecklenburg County justice system practitioners implement four strategies to reduce the number of admissions / bookings:

- Increased use by law enforcement of citations in lieu of arrest in minor offense cases;
- Tightening the processes used for issuing warrants based on citizen's complaints;
- Revision of bail setting and pretrial release policies to enable prompt release (prior to booking into jail) of low-risk offenders;
- Development of a crisis intervention center and related facilities, policies and procedures that enable law enforcement officers to divert from jail mentally ill individuals charged with minor offenses; and
- Increased use of "problem-solving" courts for substance abusing and mentally ill offenders charged with non-violent offenses.

Increasing Use of Citations in Lieu of Arrest

In some instances involving commission of minor non-traffic offenses, it should be feasible for law enforcement officers to use a citation instead of arresting the person charged with the offense. Use of citations is explicitly authorized by G.S. 15A-302 for cases when a law enforcement officer has probable cause to believe that a person has committed a misdemeanor or infraction. If citations were used more frequently in cases involving infractions and minor misdemeanors, this would reduce the number of persons brought to the jail. This in turn would reduce the future need for intake processing capacity, bed space, and staffing.¹ Adoption of policies calling for increased use of citations in non-traffic cases is a law enforcement agency policy decision which may require new policy directives that are reinforced by appropriate training of officers. As the principal law enforcement agency in Mecklenburg County the Charlotte-Mecklenburg Police Department (CMPD) has the discretion to expand use of citations as a means of reducing intake volume at the APC.

To safely increase use of citations, police officers will need to confirm the identity, residence and prior record of the person alleged to have committed an offense. We recognize that issuance of a citation would not be appropriate if the defendant does not have a residence in the vicinity, has a history of serious or violent crimes, or is not able to understand the significance and obligations of a citation. In order for citations to be used effectively:

- Police officers must be able to obtain reliable information on the living situation and prior record of the person at the time of the initial contact with the person charged with an offense;

¹ Use of citations as an alternative to arrest in cases involving minor offenses is explicitly recommended by the American Bar Association's *Standards on Pretrial Release*. See Standard 10-2.1 (Third Edition, 2007).



- Criteria must be established governing use of citations in lieu of arrest for non-traffic misdemeanors and infractions; and
- CMPD may wish to structure an internal review process to determine whether a citation should be issued, perhaps involving communications between the officer on the scene and a supervising officer.

Greater use of citations will require providing officers with ways to rapidly make positive identification of the defendant, access his or her prior criminal record information, and make initial checks regarding the suspect's residence. It is possible for this to be done from patrol cars and/or through use of a system of Live-Scan positive identification centers located strategically around the County.

In addition to potential revisions in police policies and practices governing issuance of a citation, mechanisms would have to be put in place to:

- set a date (as soon as possible after being cited) for the person to appear in District Court, with that date shown on the citation;
- remind those cited about their court dates, perhaps in collaboration with the currently existing MCSO Pretrial Release program; and
- take rapid follow-up action in the event of non-appearance on the scheduled date.

A large proportion of those arrested and brought to the APC are charged with relatively minor offenses (e.g., driving while license revoked, resisting a public officer, trespassing, no operator's license, open container). **If police officers had issued citations to individuals charged with these minor offenses, we estimate that the number of admissions to the Arrest Processing Center (APC) during 2007 could have been reduced by as much as 20%.** This would have had little impact on jail ADP, since most of these arrestees stay only a short time, but it would have significantly reduced the workload of APC staff and benefited police officers by speeding the admission process for those who must be arrested. In the longer term, reducing the volume of APC admissions can lengthen the useful life of that facility, enabling the County to postpone construction of additional intake space at that or another location.

The Kimme team recommends that the MPWG expand its membership to include law enforcement representatives in a discussion of ways to enhance use of citations for those charged with minor offenses. Once target populations and citation criteria are agreed upon, the potential impacts of applying them can be modeled using profile information available for current admissions to the APC. An effective citation system must include notification and supervision mechanisms that can help ensure that cited individuals appear in court and meet other court-ordered obligations.

Revising the Process for Issuing Citizen-Initiated Warrants

In response to recommendations of the Kimme team, the MPWG has developed a strategy for ensuring that citizen complaints are screened by the District Attorney's office prior to issuance of a warrant. The MPWG also has provided an estimated annual cost to implement this screening process (see Chapter V). Since 43% of all misdemeanor warrants issued in 2006-07 were civilian-initiated, DA screening of citizen complaints to prevent inappropriate issuance of warrants could significantly reduce both law enforcement workload and admissions to the APC.



Revising Bail-Setting and Pretrial Release Policies and Practices

An individual who is arrested and brought to the Mecklenburg County Jail is not formally booked into the jail immediately. Rather, the person goes through an intake process during which his or her possessions are confiscated, the person is photographed and fingerprinted, a medical / mental health screening is conducted, identity and prior criminal record are checked, citizenship status is checked, a bail amount is set by a magistrate, and the person is interviewed by the Pretrial Release Unit of the Sheriff's Office to determine eligibility for possible release on non-financial conditions. Overall, it takes an average of approximately nine and a half hours from initial intake at the Jail until a person is formally booked into the Jail.

The current bail policy in Mecklenburg County (the 26th Judicial District of North Carolina) was established six years ago by a local order signed by judges who were then Chief Judge of the District Court and Senior Resident Judge of the Superior Court. It establishes a schedule of bail amounts based solely on the seriousness of the alleged offense, and is intended to be used by magistrates as the basis for setting bond amounts for persons who are not released on non-financial conditions or unsecured bond. However, under North Carolina law (G.S. 15A-534), a judicial official considering release of a defendant in a non-capital case has several possible options, the first three of which provide for release on non-financial conditions or on unsecured bond. The options are to:

1. release the defendant on a written promise to appear;
2. release the defendant on defendant's execution of an unsecured appearance bond in an amount specified by the judicial officer;
3. place the defendant in the custody of a designated person or organization agreeing to supervise him; or
4. only if the judicial officer determines that release under any of the first three options "will not reasonably assure the appearance of the defendant as required; will pose a danger of injury to any person; or is likely to result in destruction of evidence, subornation of perjury, or intimidation of potential witnesses" require the posting of a secured bond (typically obtained through a bondsman).

Thus, **the statutory presumption is for release on non-financial conditions.** If a secured bond is deemed necessary, the judicial officer is to record the reasons for this determination "in writing to the extent provided in the policies or requirements issued by the senior resident judge pursuant to G.S. 15A-235."

According to G.S. 15A-234(c), in determining which conditions of release to impose the judicial officer must, on the basis of available information, take into account the following: the nature and circumstances of the offense charged; the weight of the evidence against the defendant; the defendant's family ties, employment, financial resources, character, and mental condition; whether the defendant is intoxicated to a degree that he would be endangered by release; the length of his residence in the community; his record of convictions; his history of flight to avoid prosecution; and any other evidence relevant to the issue of pretrial release.

The current written bail policy for the 26th District says nothing about reviewing information about the defendant's living situation or financial circumstances, excludes many enumerated offenses from consideration for release under any mechanism other than secured bond,



does not require the magistrate to give reasons for requiring secured bond, and establishes a schedule of minimum bail amounts for a long list of offenses. In practice, it appears that the magistrates, at the time they hold a probable cause hearing following the initial fingerprinting and record check on persons brought to the jail, almost always set secured bail. The tracking analysis conducted by the Sheriff's Research and Planning Unit in December 2006 found that in the 205 cases examined, secured bond had been set by the magistrate in 87% of the cases. In the other 13%, no bond was set, generally because the case involved charges of domestic violence. The statutory options of releasing the defendant on a written promise to appear or on an unsecured appearance bond are almost never used by the magistrates at this stage.

At present, the bail amount is set by magistrates **who do not have** any information about the defendant's current family ties, employment, financial resources, or character references. This information is subsequently gathered and verified for many defendants by staff of the Sheriff's Pretrial Services Unit, who only interview defendants after the magistrates have set bail using a risk assessment instrument to gather information about defendants (family ties, employment, length of residence in the County, substance abuse history, etc.) that provides an estimate of the risk that a defendant will fail to appear for court dates or will commit an offense if released.

From the Kimme team's observation of arrest processing at the Central facility, it appears that Pretrial Services could interview defendants before they are brought upstairs to the "magistrate hall," so that relevant information could be made available to the magistrates as they make probable cause determinations and set bail.² The practice of setting secured bail solely on the basis of charging information in the arrest affidavit seems questionable under the North Carolina statute, especially in view of the potential availability of a much wider range of information about the defendant.

The bail amount is subsequently considered by the District Court Judge at the time of the defendant's first appearance (generally within 24 to 48 hours unless the defendant has been able to post the amount of the bail set by the magistrate). However, the practical effect of the current highly restrictive bail policy is to keep many defendants in jail for at least one and up to three nights (if they are arrested on a Friday) before they get to District Court. Data collected by the Sheriff's Research and Planning unit indicates that many of the defendants currently held for several days could be safely released: approximately 50 percent are employed and almost 75 percent have lived at their current residence for at least 3 months (44% for over a year). While other data regarding risk are also important to examine, the fact that a large number of defendants are arrested on relatively minor charges and that many of them have stable roots in the community suggests that a significantly greater proportion could be safely released before being booked into the jail.

The Pretrial Services Unit's assessment process is much more consistent with applicable North Carolina law than are the current magistrate bail-setting practices. Many more

² A study of arrest processing conducted by the Sheriff's Research and Planning Unit in February 2007 found that the average time spent "downstairs" following initial fingerprinting and photographing, pretrial interviewing could be done during this period. Once the ID and record check is completed, defendants are taken "upstairs" to the magistrate hall, where they are first interviewed by the magistrate (who also makes a probable cause determination) and then interviewed by the Pretrial Services Unit. The time until completion of the magistrate's proceeding took about an hour, and the time waiting for and participating in the pretrial release interview averaged about 46 minutes. It seems clearly feasible to interview most defendants prior to their appearance before the magistrate.



defendants could be safely released, under appropriate supervision as necessary, if court policies permitted such release and if the Pretrial Services Unit were staffed and equipped in a way that would enable the Unit to provide such supervision. At the beginning of the Kimme study, the Pretrial Services Unit was relatively small (approximately ten persons) for a jurisdiction with the intake volume that Mecklenburg County experiences. With such a small number of staff, the Unit could not interview a large volume of defendants, and had only a limited capacity to provide supervision of released defendants (using methods that include telephone and in-person check-ins by the defendant, curfew requirements supplemented by random telephone checks, drug testing, and use of electronic monitoring and GPS technology for a small number of higher-risk defendants). To expand use of supervised release as an effective alternative to secure detention in the jail, it will be necessary to enlarge the staff of the Pretrial Services Unit and acquire the equipment needed to use modern technology (e.g., electronic monitoring, GPS tracking, and voice recognition software) to handle a larger number of defendants under supervised release. It will also be necessary to expand the number of offenses that can be considered for release under non-financial conditions, i.e., to change the court's bail policy for the 26th Judicial District.

Revising procedures to ensure that defendants are interviewed by Pretrial Services and relevant information is provided to the magistrates will not diminish magistrates' authority and effectiveness. On the contrary, this approach will enable magistrates to base their bail setting and release decisions on more complete information. Magistrates must also be to exercise their judicial discretion to depart from the recommendation provided by the Pretrial Services Unit, setting bond and release conditions that they deem appropriate and provided their reasons for so doing in writing as a part of the record of the case.

The Kimme team recommends that the County, the Sheriff's Office and the courts collaborate to:

- Revise the pretrial intake process so that the Pretrial Services Unit interviews defendants and prepares a report with risk assessment and recommendations concerning release prior to the magistrate hearing.
- Establish a revised Bail Policy for the 26th Judicial District that sets forth procedures concerning release before trial that are more consistent with the applicable North Carolina law, that reduce the number of offenses for which secure bond is required, that enable the release of a greater number of arrested defendants than takes place under current policy and practice, and that provide for appropriate protection of public safety.
- Ensure that the MCSO Pretrial Services Unit has the capacity (staff, equipment and software) to provide supervision appropriate for the nature and seriousness of assessed risks for defendants released on non-financial conditions or unsecured bond
- Develop a continuum of pretrial release conditions that can help to ensure that defendants posing different levels and types of risks will be adequately supervised and supported in returning to appear in court.
- Continue to evaluate the impact of revised procedures on failure-to-appear rates, pretrial crime committed by release defendants, jail population, and other factors identified as relevant to assessing the effectiveness of the changes.



Providing for release under supervision of a larger number of defendants than are currently released pretrial will require an increase in funding for the Sheriff's Pretrial Services Unit. The MPWG has developed an estimate of annual funding needed to augment the capacity of the Unit (see Chapter V), along with bail and pretrial release policy changes that should be adopted by the 26th Judicial District. We are certain that the operating cost increases for Pretrial Services will be far more than offset by the reductions in jail ADP and jail bed space needs that can be realized.

Although the consultant team cannot precisely estimate the impact of these changes in pretrial release policies and procedures (primarily because pretrial risk assessment information is not currently recorded in either the APC or jail computer information systems), we believe that it will significantly reduce the volume of bookings into the jail system, reduce the jail ADP, and bring the County's pretrial release system into alignment with both North Carolina statutes and evidence-based practice standards for effective pretrial release. It is therefore a worthwhile investment of County resources to enhance the screening and supervision capacity of MCSO's Pretrial Services Unit.

Developing a Mental Health Crisis Intervention Center

Mecklenburg County's Area Mental Health (AMH) agency has begun implementing a crisis intervention system that will serve mentally ill individuals who are currently apprehended and brought to jail accused of minor offenses. Although a crisis intervention facility may have daily operating costs (for residential clients) comparable to that of a jail, it is likely that over time the County will save money by stabilizing chronically mentally ill individuals through crisis intervention, supported housing and continuing case management.

Jail intake processes should include a mental health and substance abuse assessment by trained staff (health services, jail booking and/or AMH personnel) empowered to refer individuals for transfer to the AMH crisis center when necessary and appropriate. The Kimme team has provided AMH with examples of objective screening tools validated by researchers that can be used to triage all arrestees for possible mental health issues; individuals identified as at-risk can then be more intensively evaluated by mental health practitioners.

Ideally, police officers should be able to access AMH staff to assist in triaging a crisis situation in the field. If officers and AMH personnel determine that the individual's alleged offense(s) and prior record are relatively minor and signs of mental illness and/or intoxication are verified, then the individual could be transported to the crisis center for further assessment and stabilization. Implementing this recommendation would require (1) intensive training for a cadre of CMPD officers who volunteer to serve as primary Crisis Intervention Team members; and (2) less intensive training of the entire CMPD force and other law enforcement officers, to familiarize them with the objectives and procedures for this option.

A Sheriff's Department study of 81 chronic offenders who were admitted to the County jail five or more times in 2005 revealed that 83% of them were known to Area Mental Health as having a drug and/or mental health diagnosis, 41% were homeless, and over half had only misdemeanor charges during 2005. During that year, these individuals served a total of 7,440 days in jail at a cost of approximately \$800,000 to the County, and appeared in court an average of 48 times, costing taxpayers an estimated \$780,000 for case processing.³

³ See MCSO Research and Planning Unit, *Chronic Offender Study: Final Report* (March 2007)



Investing this \$1.5 million dollars in services designed to break their cycle of recidivism could have resulted in significant cost savings over time. Any reduction in the frequency of crises experienced by these chronic minor offenders will reduce the likelihood that they will again come into contact with the justice system and be jailed.

The Kimme team strongly supports the AMH effort, and we encourage the County to reach out to other systems of care, such as hospitals, that may benefit from investing in breaking the cycle of dysfunction in which these individuals become trapped.⁴

Expanding the Capacity of Problem-Solving Courts

Although Kimme & Associates did not undertake a detailed study of Mecklenburg County's drug and mental health courts (also called problem-solving courts), it is our impression, bolstered by the opinions of various County practitioners, that these options are currently underutilized and under funded. Research in other jurisdictions has shown that drug courts can be highly effective in breaking the cycle of recidivism for addicted offenders, and that mental health courts are a promising element in a comprehensive continuum of intervention and support for the chronically mentally ill who are also "frequent flyers" in the justice system. In the long run, successful stabilization of these individuals can reduce both admissions to and average stays in jail. Therefore, we endorse the addition of case managers for these courts that is included in the implementation cost estimate provided by the MCWG.

B. REDUCING PRE-DISPOSITION ALOS IN JAIL

As noted earlier, the substantial increase in Mecklenburg's jail population over the past 17 years is due primarily to increases in inmates' ALOS. Since a substantial majority of state-charged inmates are awaiting disposition, the greatest reductions in jail population can be realized by shortening the ALOS of persons detained for lengthy periods pending disposition.

The Kimme team recommends four strategies to expedite the processing of misdemeanor and felony cases:

- Revising procedures for handling felony cases in Superior Court, incorporating modern techniques of effective case management and utilizing the Trial Court Administrator's Office to coordinate scheduling and take responsibility for overall case and caseload management;
- Expediting the resolution of low-level felony cases through early plea negotiations in District Court, supported by rapid drug testing and other forensic evidence procedures;
- Revising procedures for handling cases of jailed misdemeanants, including rapid screening of cases by the District Attorney and Public Defender and setting early trial dates for cases that are not resolved at first appearance ; and

⁴ In Portland, OR, area hospitals contribute, via a non-profit agency serving the homeless, to the initial cost of supported housing for chronic homeless individuals they refer, many of whom have mental health and substance abuse issues and all of whom are chronic users of emergency room care. These hospitals estimate that they avoid about \$100,000 in future emergency room costs for each person who is successfully stabilized. In the two and half years since its inception, this program has served 280 clients, 80% of whom are still in stable housing and 85% of whom have not returned to an emergency room.



- Regularly reviewing the status of defendants in detention to ensure that their cases are processed as efficiently as possible.

The MPWG, in its Criminal Case Management Plan (CCMP), has proposed a comprehensive approach to criminal case processing that is consistent with these recommendations. However, we believe that it does not sufficiently emphasize early resolution of low-level felony cases, and we strongly urge that the court system adopt policies that encourage early pleading and sentencing in these cases.

If fully implemented, the MPWG's currently recommended changes in policy and practice would significantly reduce both jail ALOS and ADP (see impact summary table in Chapter V). The Kimme team strongly endorses the CCMP and recommends that the County fund its implementation as proposed in the proposed MPWG cost summary. We further urge that the County encourage the courts to adopt more aggressive policies that will enable earlier resolution (for example, through pleading in the District Court) of low-level, non-complex felony cases of detained defendants that now take far too long, on average, to resolve.

C. REDUCING THE PENDING CASE BACKLOG

When Kimme & Associates began working with Mecklenburg County practitioners, the pending caseload in the Superior Court was nearly equal to the total number of dispositions in court year 2005-06. By contrast, a healthy pending caseload would be approximately one-third of the total number of annual filings, i.e., a four-month supply as opposed to a full year's supply of unresolved cases. Mecklenburg County's pending felony case backlog is a major obstacle to implementation of a cost-effective system that will reduce use of jail beds through more efficient processing of cases. Newly filed cases (especially those in which there is the possibility of a trial) must wait in line behind the accumulated old cases, and the wait is often very long. The MPWG, and in particular the District Attorney's office, is taking steps to reduce the Superior Court backlog. The Kimme team supports their efforts, which should have the following benefits:

- Moving some of the longest-stay inmates out of the jail by resolving their cases;
- Achieving more manageable workloads for everyone;
- Resolving newly filed cases much more rapidly than in the past;
- Reducing the length of stay of defendants admitted into jail; and
- Easing the pressure on the Sheriff's Pretrial Services unit to provide long-term supervision of released defendants by shortening their average time awaiting disposition.

In order to avoid accumulating another pending case backlog in the future, the DA's office, along with the Trial Court Administrator in the proposed expanded role, must continue to monitor the size and nature of the pending caseload, with a particular focus on jail cases.

D. SUPPORTING AND MONITORING JAIL POPULATION MANAGEMENT EFFORTS

The Kimme team recommends that the County establish a system within the County Manager's office to support and monitor the results of jail population management efforts into the future. As Mecklenburg County acknowledges through its "managing for results" initiative, continued monitoring of progress is essential to achieving jail cost avoidance goals. Participating as a review body in this monitoring system could become a key responsibility of a newly-energized Criminal Justice Advisory Group.



Justice system policymakers must agree on a set of key indicators that they will track in collaboration with the county. The consultant team suggests using the list of key indicators below as a starting point for discussion. The primary purposes of developing a monitoring system are 1) to track the success of ongoing policy change efforts and 2) to identify areas where improvement or fine-tuning may be necessary to keep jail population management initiatives on track.

There are several key principles to keep in mind:

- Indicators are most useful when they are reviewed in the context of historical trends, rather than being examined at a single point in time or in comparison to only the previous year or two.
- A report on system performance indicators should be concise and consistent over time. However, it is possible to expand the number of indicators as policymakers and practitioners become aware of additional factors that should be considered in assessing the health of the justice system.
- Performance indicator reports should generally be prepared and circulated to key policymakers and justice system leaders on a monthly basis. It may also be useful to summarize every three months of data into a quarterly report.
- Graphics (e.g., bar graphs, pie charts, trend lines) can summarize and compare a considerable amount of information relatively concisely.
- In each area it is useful to display the system goal(s) or standard(s) for which the performance indicator is relevant.
- The report should include a narrative summary highlighting progress in relation to goals and identifying trends that suggest developing issues or concerns.
- If overall performance indicators point to potential problems, then the much larger data sets stored in the information system(s) used by the courts, the Sheriff's Office and other justice system agencies in the County can be used for more targeted analyses of specific problem areas.

The performance indicators outlined below are intended to be incorporated into a monthly report. The information is not currently available from a single source, but can be compiled from the different automated information systems and routine statistical reports already used and produced by the courts, District Attorney, Sheriff's office and other justice system agencies. The consultant team recommends keeping the report simple, limited to the most important data elements, together with brief narrative analyses.

The indicators listed below are offered as measures of system performance in relation to goals. It would also be appropriate for the courts and other justice system agencies to set goals for their own performance in these and other areas, but the focus here is on overall system performance.

Suggested Jail Population Management Performance Indicators

- Total number of arrestees brought to arrest processing center during the month
- Total number of bookings into the jail in the month
- Jail population as of the end of the month, by major category
 - Male/Female



- Pretrial detainees/sentenced offenders/persons awaiting probation revocation hearing, etc.
 - Federal marshal/ICE/state-charged
- Average daily population (ADP) during each month
- Peak population during the month
- Average length of stay, by major population category: gender, federal/state, and
 - Pretrial detainees with felony charges
 - Pretrial detainees with only misdemeanor charges
 - Persons awaiting probation revocation hearings
 - Persons sentenced for felony conviction
 - Persons sentenced for misdemeanor convictions only
 - Persons serving jail time as a sanction for probation violations
- Number of persons released from jail in the month (both prior to and after booking) by charge and type of release (e.g. surety bond, personal bond, release to the Sheriff's Pretrial Release Program, diversion to mental health crisis facilities/programs, sentence completed, transfer to other jurisdiction)

Suggested Criminal Case Management Performance Indicators

- Number of cases pending at start of month, by category
- Number of new cases filed during the month
- Number of cases disposed during the month, by type of disposition - plea, verdict, dismissal, nolle prosequere, etc.
- Number of cases pending at end of month, by category and age in 90-day increments
- Number of cases pending at the end of the month by category – absolute number and as a percentage of filings in the preceding 12 months
- Number of defendants pending at end of month, by charge category, age, and custody status
- Total number of pending post-indictment cases – absolute number and as a percentage of filings in the preceding 12 months
- Number and percentage of cases in each relevant category that have been pending for longer than the case processing time standard relevant to that category of case, by custody status
- Number of dispositions of indictments during the preceding 12 months as a percentage of new indictments filed during the preceding 12 months
- Number of cases in which a scheduled trial has been held – absolute number and as a percentage of the total number of trials scheduled



V. PROJECTED JAIL ADP IMPACTS OF IMPLEMENTING MECKLENBURG PRACTITIONERS' CONSENSUS PLAN

Using data on a three-month sample of all releases from the MCSO jail system between March 1 and May 31, 2007 obtained from the jail's Offender Management System (OMS), the Kimme & Associates team estimated the jail ADP impact of the Mecklenburg Practitioners Work Group's proposed strategies to expedite felony and misdemeanor case processing. The results are summarized in the table below, along with the costs estimated for each by the MPWG. Collectively, implementing the various approaches to expediting case processing could reduce the state-charged inmate population by nearly twenty percent.

Mecklenburg Practitioner Work Group Consensus Plan Cost Benefit Analysis Summary

Policy Change	Estimated Annual Cost	Estimated State Inmate ADP or Jail Bookings Reduction
<i>Expediting Court Processing of Jailed Cases</i>		
Case Management Plan with H&I Felony Cases in Circuit Court	\$997,162	11.9%
Misdemeanors -Early Intervention, Expedited Processing	\$339,660	6.8%
VOPs disposed within 45 days	No additional	0.7%
Murder cases disposed within 2 years	No additional	0.4%
Enhance capacity of problem-solving courts (drug, mental health)	\$235,629	Unknown reductions in jail bookings and predisposition ALOS
<i>Reducing Volume of Jail Admissions/Bookings</i>		
Revised Bond / PTR Policy	\$364,662	Unknown reduction in jail bookings
Pre-warrant screening of citizen complaints	\$261,387	Unknown reduction in APC admissions
TOTALS	\$2,198,500	19.8% reduction in state inmate ADP



Modified ADP & Bed Capacity Projections

The following table summarizes projected jail ADP assuming a 19.8% reduction in state-charged inmate ADP to be accomplished via implementing the MPWG policy recommendations. The table shows modified bed space needs (taking into account peaking and classification factors), projected shortfalls (based on the current jail system capacity of 2,776 beds), and the reduction in beds that would be needed if MPWG policy changes are implemented.

Modified ADP and Bed Needs Projections

<i>Year</i>	<i>2020</i>	<i>2030</i>
ADP	3,877	5,654
Bed Need	4,401	6,276
Shortfall	1,625	3,500
Reduction in shortfall compared to Base projection	-710	-1,011



VI. MODIFIED FACILITY SPACE AND COST SCENARIO AND FACILITY OPTIONS PER SYSTEM CHANGE COMMITMENTS

A. INTRODUCTION

This chapter documents the re-calculated project figures and costs that result from reductions in base projected inmates populations and intake flow. These "Modified" figures are used to both provide revised estimates relevant to final projected need and costs, and figures against which the benefits of changes to the criminal justice system are measured to determine bottom-line cost avoidance.

The explanations behind all of the tables and charts are essentially the same as those provided in Chapter III. Thus for brevity's sake the explanations will not be repeated in this chapter. Instead, only brief introductions, summaries, and discussions of differences, where useful, will be provided.

To reiterate the findings of the last chapter the information which follows is predicated upon a significantly reduced projected jail population through the year 2030. The differences between the Base and Modified projections are summarized below.

PROJECTION SUMMARY:

	2020			2030		
	ADP 2020	TARGET BED NEED 2020	BED SHORTFALL	ADP 2030	TARGET BED NEED 2030	BED SHORTFALL
BASE Projection	4,543	5,111	2,335	6,625	7,287	4,511
MODIFIED Projection	3,877	4,401	1,625	5,654	6,276	3,500
SAVINGS	-666	-710		-971	-1,011	

When new facilities open in 2012, the Modified ADP should be virtually the same as it was in calendar year 2007 (2,682 vs. 2,671, respectively). Therefore, at initial opening the consultants estimate that only six (6) 64 bed pods of new housing will need to open to resolve the overcrowding in existing direct supervision housing pods reported in Chapter II. If the Sprung facilities now being built are still being utilized at that time, they could handle the entire overflow need. Thus no new beds would need to open in 2012. Alternately, for staff efficiency's sake, it might make more sense to operate the new more staff-efficient 64 bed pods than the less efficient 40 bed Sprung pods (see the discussion on this in Chapter VII).

B. MODIFIED HOUSING-CLASSIFICATION WORKSHEETS

The proportions of inmates that fall into different classification categories as determined in Chapter III are retained here. Therefore, every classification group shrinks in size to a degree equal to the basic reduction seen between Base and Modified inmate population projections.



Mecklenburg County N.C. Detention-Corrections Master Plan

HOUSING WORKSHEET #2a

2020

Classifications/Distribution based on Future ADP, *MODIFIED per system changes*
Mecklenburg County

4/7/08

MODIFIED

Future ADP = **3,877 ADP** **4,400 beds** **1.135 P.F.** 1,624 beds Needed

Male = 92.1% **3,570.7**
Female = 7.9% **306.3** **1.20 P.F.**

CLASSIFICATION - SEPARATION GROUPS	Low	2020 AVG.%	AVG	High	CURRENT PEAK FACTOR	BED NEED	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	MIN. NUMBER of UNITS or PODS	OCCUPANCY TYPE (single, double, dorm)
MALE ADP:										
Classification-Orientation		4.5%	175.6	255	1.45		DIRECT	56		Single, wet
Classification-Fed		1.6%	61.3	83	1.36		DIRECT	48		Single, wet
Disc Detention (DDU-ADU)		7.0%	271.4	320	1.18		Pod Remote	12/36		Single, wet
Inmate Workers		5.7%	220.2	252	1.14		DIRECT-Pod Remote Hybrid	56		Single, DRY
Maximum (1 & 2)		3.0%	116.3	125	1.07		Pod Remote	16/48		Single, wet
Negative Pressure		0.1%	1.9	4	2.00		DIRECT			Single, wet
Medical Max		0.3%	12.8	19	1.45		Pod Remote			DORM
Medical Infirmary		0.3%	10.9	14	1.32		DIRECT	12		Single, wet
Persistent Mental Illness (PMI)		0.5%	19.4	24	1.23		Pod Remote			Single, wet
Suicidal (level 2)-Spcl Mental Health		0.2%	7.3	10	1.36		DIRECT	28		Single, wet
Medical Min-Med		1.5%	58.2	69	1.18		DIRECT	56		Single, wet
Medium-Minimum (3-8)		40.8%	1581.4	1653	1.05		DIRECT	64		Single DRY
Protective Custody (PC)		0.6%	22.5	31	1.40		Pod Remote			Single, wet
Minimum		10.0%	387.7	444	1.14		DIRECT	40		Dorm
Step Down		0.7%	28.7	37	1.31		Pod Remote	16		Single, wet
Substance Abuse		6.0%	233.2	252	1.08		DIRECT	52		Single DRY
Weekenders		1.0%	39.2	110	2.80		DIRECT	50		Dorm
Youthful Offenders (YO)		2.4%	91.5	100	1.09		DIRECT	12		Single, wet
YO Disc		0.4%	13.6	23	1.68		DIRECT	12		Single, wet
YO Max		0.2%	7.8	13	1.65		DIRECT	12		Single, wet
YO Prot. Custody		0.1%	4.7	8	1.81		DIRECT	12		Single, wet
YO Med-Ment		0.2%	7.8	11	1.36		DIRECT	12		Single, wet
YO Classification-Orientation		0.2%	7.8	11	1.36		DIRECT	12		Single, wet
VOCATIONAL		2.0%	77.5	88	1.14		DIRECT	40		Dorm
Work Release		2.9%	110.9	124	1.12		DIRECT	60		Single DRY
Male Total =		92.1%	3,570.7	4,077						

CLASSIFICATION - SEPARATION GROUPS	Low	2020 AVG.%	AVG	High	PEAK FACTOR	BED NEED	SUPERVISION - SURVEILLANCE APPROACH	MAXIMUM DENSITY per UNIT or POD	MIN. NUMBER of UNITS or PODS	OCCUPANCY TYPE (single, double, dorm)
FEMALE ADP:										
Classification-Orientation		0.9%	36.4	56	1.54		DIRECT	56		Single, wet
Classification-Fed							DIRECT	48		Single, wet
Disc Detention (DDU-ADU)		0.5%	19.4	27	1.39		Pod Remote	12/36		Single, wet
Inmate Workers		1.0%	38.8	46	1.18		DIRECT-Pod Remote Hybrid	56		Single, DRY
Maximum (1 & 2)							Pod Remote	16/48		Single, wet
Negative Pressure							DIRECT			Single, wet
Medical Max							Pod Remote			DORM
Medical Infirmary		0.06%	2.3	4	1.90		DIRECT	12		Single, wet
Persistent Mental Illness (PMI)							Pod Remote			Single, wet
Suicidal (level 2)-Spcl Mental Health		0.1%	4.3	6	1.45		DIRECT	28		Single, wet
Medical Min-Med							DIRECT	56		Single, wet
Medium-Minimum (3-8)		3.0%	116.7	138	1.18		DIRECT	64		Single DRY
Protective Custody (PC)							Pod Remote			Single, wet
Minimum							DIRECT	40		Dorm
Step Down							Pod Remote	16		Single, wet
Substance Abuse		1.5%	58.2	69	1.18		DIRECT	52		Single DRY
Weekenders							DIRECT	50		Dorm
Youthful Offenders (YO)		0.2%	7.8	15	1.90		DIRECT	12		Single, wet
YO Disc							DIRECT	12		Single, wet
YO Max							DIRECT	12		Single, wet
YO Prot. Custody							DIRECT	12		Single, wet
YO Med-Ment							DIRECT	12		Single, wet
YO Classification-Orientation							DIRECT	12		Single, wet
VOCATIONAL							DIRECT	40		Dorm
Work Release		0.5%	19.4	26	1.36		DIRECT	60		Single DRY
Female Total =		7.8%	306.3	387						



C. MODIFIED POD NEEDS

Housing pod needs were adjusted downward proportionately to the decrease in inmate population under the Modified projections.

2020 - HOUSING POD NEEDS - PHASE 1; 1,644 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2020; 2,404 beds added, 5,180 Beds total when completed.

Phase 1

4/10/08

MODIFIED

Pods

TYPE 1; 50 BED, POD REMOTE DORM	0
TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	10
TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	0
TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	2
TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	6
TYPE 6; 50 BED, DORM, DIRECT (Weekender)	2
TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	6
TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	10

TOTAL NEW PODS:

36

2030 - HOUSING POD NEEDS - PHASE 2 1,848 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2030; 2,144 new beds added, 7,324 Beds total when completed

Phase 2

4/10/08

MODIFIED

Pods

TYPE 1; 50 BED, POD REMOTE DORM	
TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Minimum, Substance Abuse)	18
TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	0
TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	4
TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	2
TYPE 6; 50 BED, DORM, DIRECT (Weekender)	
TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	6
TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	8

TOTAL NEW PODS:

38



Mecklenburg County N.C. Detention-Corrections Master Plan

D. MODIFIED SPACE ESTIMATES

Phase 1 space needs estimates declined from 1,025,405 gross square feet (gsf) for the Base projection estimate to 717,598 gsf for the Modified estimate, a savings of nearly 308,000 gsf.

MODIFIED PRELIMINARY SQ. FT. ESTIMATE - PHASE 1; 1,644 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2020; 1,644 beds added, 4,420 Beds total when completed.

Phase 1

4/10/08

MODIFIED

2020

ADDITIONAL HOUSING SQUARE FOOTAGE:

	SQ. FT./Pod		Pods		SQ. FT.
TYPE 1: 50 BED, POD REMOTE DORM		X	0	=	0
TYPE 2: 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	14,750	X	10	=	147,500
TYPE 3: 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	13,000	X	0	=	0
TYPE 4: 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	11,600	X	2	=	23,199
TYPE 5: 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	12,800	X	6	=	76,800
TYPE 6: 50 BED, DORM, DIRECT (Weekender)	6,400	X	2	=	12,800
TYPE 7: 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	3,200	X	6	=	19,200
TYPE 8: 40 BED, DORM, DIRECT (Minimum, Vocational)	10,000	X	10	=	100,000
SUB-TOTAL HOUSING			36		379,499
HOUSING AREA GROSS FACTOR (miscellaneous gross square feet allowance)					x 1.05
TOTAL ADDITIONAL HOUSING SQUARE FOOTAGE					398,474

ADDITIONAL SUPPORT & GENERAL GROSS SQUARE FOOTAGE:

	SQ. FT. Factor	Beds	
Additional NORTH Square Footage to resolve existing shortages			19,248
Additional CENTRAL Square Footage to resolve existing shortages			28,029
Additional WRRRC Square Footage to resolve existing shortages			8,259
NEW SUPPORT SQUARE FOOTAGE plus BUILDING GROSS SF (corridors, mechanical, etc.):	160	1,644	263,588
TOTAL			319,124
BUILDING GROSS FACTOR (mechanical, structure, shafts, walls, stairs, corridors, miscellaneous)			x 1.00
TOTAL ADDITIONAL SUPPORT SQUARE FOOTAGE			319,124

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 1

Square Feet per Bed	717,598
	436

The space savings in Phase 2 is 120,525 gsf. The combined savings in Phases 1 and 2 is nearly 430,000 gsf.



Mecklenburg County N.C. Detention-Corrections Master Plan

2030 - MODIFIED PRELIMINARY SQ. FT. ESTIMATE - PHASE 2 1,848 NEW BEDS OF HOUSING

Mecklenburg County, NC

Serves needs through 2030; 1,848 new beds added, 6,268 Beds total when completed

Phase 2

4/10/08

MODIFIED

2030

ADDITIONAL HOUSING SQUARE FOOTAGE:

	SQ. FT./Pod		Pods		SQ. FT.
TYPE 1: 50 BED, POD REMOTE DORM		X		=	0
TYPE 2: 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	14,750	X	18	=	265,500
TYPE 3: 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	13,000	X	0	=	0
TYPE 4: 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	12,000	X	4	=	48,000
TYPE 5: 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	12,800	X	2	=	25,600
TYPE 6: 50 BED, DORM, DIRECT (Weekender)	6,400	X		=	0
TYPE 7: 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	3,200	X	6	=	19,200
TYPE 8: 40 BED, DORM, DIRECT (Minimum, Vocational)	10,000	X	8	=	80,000
SUB-TOTAL HOUSING			38		438,300
HOUSING AREA GROSS FACTOR (miscellaneous gross square feet allowance)					x 1.05
TOTAL ADDITIONAL HOUSING SQUARE FOOTAGE					460,215

ADDITIONAL SUPPORT & GENERAL GROSS SQUARE FOOTAGE:

	SQ. FT. Factor		Beds	
Additional NORTH Square Footage to resolve existing shortages				0
Additional CENTRAL Square Footage to resolve existing shortages				0
Additional WRRRC Square Footage to resolve existing shortages				0
NEW SUPPORT SQUARE FOOTAGE plus BUILDING GROSS SF (corridors, mechanical, etc.):	150		1,848	277,200
TOTAL				277,200
BUILDING GROSS FACTOR (mechanical, structure, shafts, walls, stairs, corridors, miscellaneous)				x 1.00
TOTAL ADDITIONAL SUPPORT SQUARE FOOTAGE				277,200

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 2 MODIFIED

737,415

Square Feet per Bed

399

E. GENERIC CONSTRUCTION AND PROJECT COST ESTIMATES – MODIFIED OPTION

1. Phase 1 Costs

Below are the generic construction and project cost estimates for the MODIFIED Phase 1 project. All of the same square foot cost and inflation assumptions applied to the Base estimate are used here.



Mecklenburg County N.C. Detention-Corrections Master Plan

2020 - GENERIC PROJECT COST ESTIMATE - PHASE 1; 1,644 NEW BEDS OF HOUSING + SUPPORT **PHASE 1**

Mecklenburg County, NC

Serves needs through 2020; 1,644 beds added, 4,420 Beds total when completed (including the Youthful Offender Addition).

6/28/08

MODIFIED

2020

CURRENT DOLLARS (2008):

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 1 MODIFIED	717,598
Square Feet per Bed	436
GRAND TOTAL CURRENT DOLLARS (2008) CONSTRUCTION COST ESTIMATE - PHASE 1 MODIFIED	
Dollars per Square Foot (2008 dollars):	\$275/sq.ft.
Estimated Construction Cost:	\$197,339,460
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$177,605,514
Cost per Square Foot, LOW:	\$248/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$217,073,406
Cost per Square Foot, HIGH:	\$303/sf
GRAND TOTAL CURRENT DOLLARS (2008) PROJECT COST ESTIMATE - PHASE 1 MODIFIED	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$226,940,379
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$204,246,341
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$249,634,417

INFLATED DOLLARS (2011):

GRAND TOTAL INFLATED (2011) CONSTRUCTION COST ESTIMATE - PHASE 1 MODIFIED	
Annual Construction Inflation Factor (2008-2011):	1.070
Years of Inflation until mid-point of construction (2011):	3
Total Multi-year Inflation Factor:	1.225
Inflated Dollars per Square Foot (2011 dollars):	\$337/sq.ft.
Estimated Construction Cost:	\$241,749,324
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$217,574,392
Inflated Cost per Square Foot, LOW:	\$303/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$265,924,257
Inflated Cost per Square Foot, HIGH:	\$371/sf
GRAND TOTAL INFLATED (2011) PROJECT COST ESTIMATE - PHASE 1 MODIFIED	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$278,011,723
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$250,210,551
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$305,812,895

In summary, the consultants estimate a Phase 1 construction cost in current 2008 dollars of from \$177 million to \$217 million, and Phase 1 project costs of from \$204 million to \$250 million. As noted earlier, 2008 figures are used to allow more readily understood comparisons to both year 2030 Phase 2 project cost estimates and the cost estimates produced earlier for the "Base" project.

These estimates result in \$77 million to \$93 million of construction cost avoidance compared to the Base project estimate of \$254-\$310 million. Cost avoidance for project costs in 2008 dollars is at \$86 to \$106 million when compared to the Base estimate of \$290 to 356 million.

Assuming three years until the mid-point of construction (2011), the inflated, or actual, generic construction cost estimate for the Modified Phase 1 project is \$217 million to \$266 million based on a square foot cost of from \$303 to \$371 that is inflated by 22.5% from 2008 figures (7% per year). This projected construction cost estimate results in \$93 million to \$114 million in cost avoidance when compared to the inflated Base estimate.

The inflated project cost estimate for the Modified Phase 1 project is from \$250 million to \$306 million. This projected project cost estimate results in \$107 million to \$131 million in cost avoidance when compared to the Base estimate. Again, project costs as used here



Mecklenburg County N.C. Detention-Corrections Master Plan

exclude the cost of site acquisition, building demolition, construction managers, project financing, legal services, tunnels and/or skywalks.

2. Phase 2 Costs

Below are the generic construction and project cost estimates for the MODIFIED Phase 2 project. All of the same square foot cost and inflation assumptions applied to the Base estimate are also used here. Additionally, a construction cost inflation rate of 4.5% per year is used between the period of 2001 and 2020. That adds another 48.6% to the costs after the 22.5% added for the period of 2008-2011, for a total increase over 2008 dollars of 81.8%.

2030 - GENERIC PROJECT COST ESTIMATE - PHASE 2: 1,848 NEW BEDS OF HOUSING + SUPPORT	PHASE 2
Mecklenburg County, NC	6/28/08
Serves needs through 2030; 1,848 new beds added, 6,268 Beds total when completed (including the Youthful Offender Addition)	MODIFIED
	2030

CURRENT DOLLARS (2008):

GRAND TOTAL SQUARE FOOT ESTIMATE - PHASE 2 MODIFIED	737,415
Square Feet per Bed	399
GRAND TOTAL CURRENT DOLLARS (2008) CONSTRUCTION COST ESTIMATE - PHASE 2 MODIFIED	
Dollars per Square Foot (2008 dollars):	\$275/sf
Estimated Construction Cost:	\$202,789,110
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$182,510,199
Cost per Square Foot, LOW:	\$248/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$223,068,021
Cost per Square Foot, HIGH:	\$303/sf
GRAND TOTAL CURRENT DOLLARS (2008) PROJECT COST ESTIMATE - PHASE 2 MODIFIED	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$233,207,477
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$209,886,729
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$256,528,224

INFLATED DOLLARS (2020):

GRAND TOTAL INFLATED (2020) CONSTRUCTION COST ESTIMATE - PHASE 2 MODIFIED	
Annual Construction Inflation Factor (2008-2011):	1.070
Years of Inflation until mid-point of construction (2011):	3
Total Multi-year Inflation Factor:	1.225
Inflated Dollars per Square Foot (2011 dollars):	\$337/sf
Annual Construction Inflation Factor (2011-2020):	1.045
Years of Inflation from 2011 until mid-point of construction (2020):	9
Total Multi-year Inflation Factor:	1.486
Inflated Dollars per Square Foot (2020 dollars):	\$501/sf
Estimated Construction Cost:	\$369,183,750
	CONSTRUCTION COST RANGE:
LOW Construction Cost Estimate; 90% of Estimate:	90% \$332,265,375
Inflated Cost per Square Foot, LOW:	\$451/sf
HIGH Construction Cost Estimate; 110% of Estimate:	110% \$406,102,125
Inflated Cost per Square Foot, HIGH:	\$551/sf
GRAND TOTAL INFLATED (2020) PROJECT COST ESTIMATE - PHASE 2 MODIFIED	
Project Cost Factor (excluding CM, site acquisition, major building demolition, tunnel, and skywalk costs):	1.15
Estimated Project Cost:	\$424,561,312
	PROJECT COST RANGE:
LOW PROJECT Cost Estimate; 90% of Estimate:	90% \$382,105,181
HIGH PROJECT Cost Estimate; 110% of Estimate:	110% \$467,017,443

In summary, the consultants estimate a Phase 2 construction cost in current 2008 dollars of from \$182 million to \$223 million, and Phase 2 project costs of from \$209 million to \$257 million.



These estimates result in \$30 million to \$37 million of construction cost avoidance compared to the Base project estimate of \$212-\$260 million. Cost avoidance for project costs in 2008 dollars is at \$35 to \$41 million when compared to the Base estimate of \$244 to \$298 million.

The inflated, or actual, generic construction cost estimate for the Modified Phase 2 project is \$332 million to \$406 million based on a square foot cost of from \$451 to \$551 that is inflated by 81.8% from 2008 figures. *This projected construction cost estimate results in \$54 million to \$66 million in cost avoidance when compared to the Base estimate.*

The inflated project cost estimate for the Modified Phase 2 project is from \$382 million to \$467 million. *This projected project cost estimate results in \$62 million to \$76 million in cost avoidance* when compared to the Base estimate of from \$444 million to \$543 million.

Summary – Construction/Project Cost Avoidance (in millions of inflated dollars)

Phase 1	<u>Low</u>	<u>High</u>
Construction	\$93	\$114
Project	\$107	\$131
Phase 2		
Construction	\$54	\$66
Project	\$62	\$76
Total		
Construction	\$147	\$180
Project	\$169	\$207

Cost avoidance will likely increase as other cost factors are determined (financing, CM's, legal costs, etc.).

F. MODIFIED STAFFING AND STAFF COST ESTIMATES

The worksheets that follow are developed as in Chapter III except that fewer pods are staffed, lesser staffing in support areas are factored in and staffing calculated by ratios are reduced because the ADP is reduced. In 2012, the projected ADP is less than it was in 2007. However, staffing is not reduced. Rather it grows because of the additional pods and staff needed to accommodate the existing overcrowding that causes inmates to sleep on the floor (see Chapter II).

It is important to note that the staffing does not reflect that of the Sprung structures. They were initially viewed as temporary and they require considerably more staff because of their lower pod density. See the discussion of the Sprung facilities in Chapter VI.



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections
NEW STAFF @ OPENING 2012

MODIFIED Generic Needs
2012
4/9/08

118 FEWER ADP RATIO USED 2020/2007: ADP = 2553/2671; INTAKES =
than 2007 48101/43994

	Salary	multiplier	FTE	Total Cost per Position	Notes:
1					
2	ADMIN-CENTRAL, NORTH, WRRC				No growth - same population as in 2007
3					
4					
5					
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	3.3	\$268,340
7					
8					
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00		
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	30.1	\$1,398,465
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00		
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00		
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00		
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00		
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00		
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00		
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	15.0	\$699,232
18					
19	ARREST PROCESSING				\$179,424
20	PRETRIAL				\$140,520
21	CLASSIFICATION-RECORDS-RELEASE-STAGING				
22	INMATE FINANCE-PROPERTY				\$147,713
23	FACILITY DEVELOPMENT				
24	TRANSPORT				
25	TRAINING				
26	PERSONNEL-RECRUITING				
27	FINANCE/BUSINESS MANAGEMENT				
28	INFORMATION SERVICES				
29	PROGRAMS (Central-North)				
30	MASTER CONTROL	\$46,485	1.00		
31	VISITATION-LOBBY	\$46,485	1.00		
32	WORK CREW	\$46,485	1.00		
33	FIELD TRAINING OFFICERS	\$46,485	1.00		
34	KITCHEN SECURITY	\$46,485	1.00		
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00		
36	WRRC COORDINATOR	\$46,485	1.00		
37	WRRC UNIT MANAGER	\$81,758	1.00		
38	WRRC CASE MANAGER	\$46,485	1.00		
39					
40					
41					
42					
SUB-TOTAL				\$2,833,694	



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections
NEW STAFF @ FULL OCCUPANCY 2020

Note: Detention Officer rates are used rather than deputy sheriff

MODIFIED Generic Needs
2020

4/9/08 45% ADP increase

1206 MORE ADP than 2007 RATIOS USED 2020/2007: ADP = 3877/2671; INTAKES = 58327/43994

	Salary- Fringe	multiplier	FTE	Total Cost per Position	Notes:
1					
2	ADMIN-CENTRAL, NORTH, WRRC			\$1,407,730	A ratio of existing costs to growth in projected ADP (3877/2671).
3					
4					
5					
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	21.0	
7					
8					
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00		
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	50.1	
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00		
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00	20.1	
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00	30.1	
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00	10.0	
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00	15.0	
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00	50.1	
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	95.3	
18					
19	ARREST PROCESSING			\$2,354,828	A ratio of existing costs to growth in projected Intakes using 1999-2007 data (58,327/43,994).
20	PRETRIAL			\$490,400	
21	CLASSIFICATION-RECORDS-RELEASE-STAGING			\$1,394,279	
22	INMATE FINANCE-PROPERTY			\$515,503	A ratio of existing costs to growth in projected Intakes using 1999-2007 data (58,327/43,994).
23	FACILITY DEVELOPMENT			\$505,595	
24	TRANSPORT			\$413,910	A ratio of existing costs to growth in projected ADP (3877/2671).
25	TRAINING			\$391,686	
26	PERSONNEL-RECRUITING			\$203,313	74% of training costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (3877/2671).
27	FINANCE/BUSINESS MANAGEMENT			\$171,780	
28	INFORMATION SERVICES			\$161,752	76% of personnel-recruiting costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (3877/2671).
29	PROGRAMS (Central-North)			\$620,528	
30	MASTER CONTROL	\$46,485	1.00	15.0	76% of business management (finance) costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (3877/2671).
31	VISITATION-LOBBY	\$46,485	1.00	10.0	
32	WORK CREW	\$46,485	1.00	2.1	76% of Info Services costs (from 2006 "Cost per Facility") and a ratio of existing costs to growth in projected ADP (3877/2671).
33	FIELD TRAINING OFFICERS	\$46,485	1.00	10.0	
34	KITCHEN SECURITY	\$46,485	1.00	3.3	A ratio of existing costs to growth in projected ADP (3877/2671).
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00	5.0	
36	WRRC COORDINATOR	\$46,485	1.00	1.1	5 officers at North, 19 at Central
37	WRRC UNIT MANAGER	\$81,758	1.00	1.1	
38	WRRC CASE MANAGER	\$46,485	1.00	2.2	
39					
40	OVERTIME				
41					
42					
			341.7	\$25,291,779	



Mecklenburg County N.C. Detention-Corrections Master Plan

MECKLENBURG CO, NC
STAFFING COSTS WORKSHEET
ADULT Detention/Corrections

NEW STAFF @ FULL OCCUPANCY - 2030

MODIFIED Generic Needs
2030

4/9/08 46% ADP increase

1777 MORE ADP RATIOS USED 2030/2020 against 2020 totals: ADP =
than 2020 5654/3877; INTAKES = 72258/58327

	Salary	multiplier	FTE	Total Cost per Position	Notes:
1					
2	ADMIN-CENTRAL, NORTH, WRRC			\$3,010,797	A ratio of existing costs to growth in projected ADP (5654-3877)/2671.
3					
4					
5					
6	SHIFT SUPERVISOR (Sergeants)	\$81,758	1.00	23.3	
7					
8					
9	TYPE 1; 50 BED, POD REMOTE DORM	\$46,485	1.00		
10	TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	\$46,485	1.00	90.3	\$4,195,394
11	TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	\$46,485	1.00		
12	TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	\$46,485	1.00	40.1	\$1,864,620
13	TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE (Inmate Workers)	\$46,485	1.00	10.0	\$466,155
14	TYPE 6; 50 BED, DORM, DIRECT (Weekender)	\$46,485	1.00		
15	TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders)	\$46,485	1.00	15.0	\$699,232
16	TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational)	\$46,485	1.00	40.1	\$1,864,620
17	MOVEMENT/ESCORT OFFICERS	\$46,485	1.00	105.3	\$4,894,626
18					
19	ARREST PROCESSING				\$3,034,454
20	PRETRIAL				\$631,935
21	CLASSIFICATION-RECORDS-RELEASE-STAGING				\$2,982,027
22	INMATE FINANCE-PROPERTY				\$664,282
23	FACILITY DEVELOPMENT				\$471,371
24	TRANSPORT				\$885,255
25	TRAINING				\$1,040,499
26	PERSONNEL-RECRUITING				\$529,439
27	FINANCE/BUSINESS MANAGEMENT				\$447,325
28	INFORMATION SERVICES				\$421,213
29	PROGRAMS (Central-North)				
30	MASTER CONTROL	\$46,485	1.00	20.1	\$932,310
31	VISITATION-LOBBY	\$46,485	1.00	13.4	\$621,540
32	WORK CREW	\$46,485	1.00	4.2	\$194,231
33	FIELD TRAINING OFFICERS	\$46,485	1.00	10.0	\$466,155
34	KITCHEN SECURITY	\$46,485	1.00	3.3	\$155,385
35	CLINIC/HOSPITAL-SECURITY	\$46,485	1.00	10.0	\$466,155
36	WRRC COORDINATOR	\$46,485	1.00	1.1	\$50,679
37	WRRC UNIT MANAGER	\$81,758	1.00	1.1	\$89,135
38	WRRC CASE MANAGER	\$46,485	1.00	2.2	\$101,358
39					
40					
41					
42					
			389.5		\$33,086,533



G. LIFE CYCLE COSTS AND COST AVOIDANCE

All of the facility and operational cost data for the Modified projection was collected and combined into life cycle cost analysis worksheets just as was done with the Base projection. All of the same assumptions were used.

The Life Cycle cost analysis comparing estimated costs for the Base projection and the Modified projection revealed that first year costs in 2012 are projected to be **\$20.6 million less** for generic capital project and operational costs because of criminal justice system changes to be implemented by the county.

Over a life cycle extending through 2030, there is **\$750 million** in cost avoidance projected as compared to the Base needs identified in Chapter III.

The table below summarizes the estimated capital and operational for both the Base and Modified approaches for the 2012 through 2030 life cycle, and calculates their year-to-year and total differences.

LIFE CYCLE COST SUMMARY - COST AVOIDANCE BASE to MODIFIED PROJECTIONS

YEAR	BASE ESTIMATE TOTAL ANNUAL EXPENSE	MODIFIED ESTIMATE TOTAL ANNUAL EXPENSE	TOTAL ANNUAL COST AVOIDANCE THROUGH SYSTEM MODIFICATIONS
2012	\$138,620,763	\$118,019,088	\$20,601,675
2013	\$147,829,967	\$125,992,648	\$21,837,319
2014	\$157,121,798	\$134,034,657	\$23,087,141
2015	\$166,506,029	\$142,154,493	\$24,351,536
2016	\$175,984,993	\$150,361,987	\$25,623,007
2017	\$185,552,969	\$158,635,388	\$26,917,581
2018	\$195,195,541	\$166,983,937	\$28,211,604
2019	\$204,938,514	\$175,409,051	\$29,529,463
2020	\$256,827,965	\$220,062,895	\$36,765,070
2021	\$274,456,675	\$232,977,641	\$41,479,034
2022	\$289,596,418	\$245,957,110	\$43,639,308
2023	\$304,820,863	\$259,019,196	\$45,801,667
2024	\$320,130,651	\$272,147,162	\$47,983,489
2025	\$335,526,283	\$285,350,166	\$50,176,118
2026	\$351,008,114	\$298,610,355	\$52,397,759
2027	\$366,567,083	\$311,945,744	\$54,621,339
2028	\$382,202,837	\$325,337,697	\$56,865,140
2029	\$397,905,346	\$338,794,914	\$59,110,432
2030	\$413,683,116	\$352,307,183	\$61,375,932
Totals	\$5,064,475,923	\$4,314,101,312	\$750,374,611

Below are tables documenting the life cycle calculations for the Modified option, starting first with the operational life cycle cost calculation, and second with the summary total life cycle cost calculation. This second table combines annual operational costs and financed capital costs. Total figures from the second table are what appear in the Modified Life Cycle cost column above.



Mecklenburg County N.C. Detention-Corrections Master Plan

Regarding the second table, no calculations have been made with respect to lost tax revenue as a result of buying additional property for a project, and no assumption has been made regarding the prospect of additional revenues from housing federal, state, or local inmates. Offsets from rentals are certainly a strong possibility in the early years of the new facilities when surplus bed capacity should be available.

MECKLENBURG CO, NC

MODIFIED OPERATIONS LIFE CYCLE COSTS

MODIFIED Generic Needs

4/10/08

ASSUME Inflation Factor of:		1.03		\$2,174,583		= 2008-09 Utility Costs			
				717,598 sf		= new Phase 1 S.F.		2007 jail salaries:	
				737,415 sf		= new Phase 2 S.F.		\$59,357,233	
				Cost/SF/Yr:					
	MODIFIED	\$18.40		\$2.05			Jail, jail-related		
	Projected	Misc. Oper.		Utilities		Court Trans	Personnel		
	Avg Daily	Costs with		Costs with		(Staff costs in E.)	Costs with		
	Population	Inflation*		Inflation		(Ops Costs in B.)	Inflation		
YEAR	A	B	+	C	+	D	+	E	= F
2008	2,193								
2009	2,309								
2010	2,428								
2011	2,553								
Opening 2012	2,682	\$19,833,268		\$3,781,111		\$0		\$72,096,329	\$95,710,708
2013	2,816	\$21,166,695		\$3,894,544		\$0		\$78,623,029	\$103,684,268
2014	2,954	\$22,565,168		\$4,011,380		\$0		\$85,149,729	\$111,726,277
2015	3,097	\$24,037,963		\$4,131,722		\$0		\$91,676,428	\$119,846,113
2016	3,246	\$25,594,805		\$4,255,673		\$0		\$98,203,128	\$128,053,607
2017	3,398	\$27,213,836		\$4,383,343		\$0		\$104,729,828	\$136,327,008
2018	3,554	\$28,904,185		\$4,514,844		\$0		\$111,256,528	\$144,675,557
2019	3,714	\$30,667,155		\$4,650,289		\$0		\$117,783,227	\$153,100,671
Phase 2 2020	3,877	\$32,495,590		\$6,881,099		\$0		\$124,309,927	\$163,686,617
2021	4,044	\$34,398,768		\$7,087,532		\$0		\$135,115,062	\$176,601,363
2022	4,213	\$36,360,476		\$7,300,158		\$0		\$145,920,198	\$189,580,832
2023	4,386	\$38,398,422		\$7,519,163		\$0		\$156,725,333	\$202,642,918
2024	4,561	\$40,495,677		\$7,744,738		\$0		\$167,530,469	\$215,770,884
2025	4,739	\$42,661,203		\$7,977,080		\$0		\$178,335,604	\$228,973,888
2026	4,918	\$44,876,945		\$8,216,393		\$0		\$189,140,740	\$242,234,077
2027	5,100	\$47,160,706		\$8,462,884		\$0		\$199,945,875	\$255,569,466
2028	5,283	\$49,493,638		\$8,716,771		\$0		\$210,751,011	\$268,961,419
2029	5,468	\$51,884,216		\$8,978,274		\$0		\$221,556,146	\$282,418,636
2030	5,654	\$54,322,001		\$9,247,622		\$0		\$232,361,282	\$295,930,905
Totals		\$672,530,720	+	\$121,754,621	+	\$0	+	\$2,721,209,874	= \$3,515,495,214
		19.1%		3.5%		0.0%		77.4%	

* from 2007 budget; excludes salaries, fringes, utilities, electronic monitoring costs; includes Food & Med contracts.



Mecklenburg County N.C. Detention-Corrections Master Plan

MODIFIED TOTAL LIFE CYCLE COSTS SUMMARY

Inflation Factor: **1.03**

YEAR	OPERATIONS Total Annual Cost H	+	LOST CO. TAX Rev. with Inflation I	-	Net Savings from Per Diems J	+	Interest 5.00% CONSTRUCTION/ PROJECT Annual Payment 2 Phases-Inflated K	=	MODIFIED ESTIMATE TOTAL ANNUAL EXPENSE
2012	\$95,710,708		\$0		(\$0)		\$22,308,380		\$118,019,088
2013	\$103,684,268		\$0		(\$0)		\$22,308,380		\$125,992,648
2014	\$111,726,277		\$0		(\$0)		\$22,308,380		\$134,034,657
2015	\$119,846,113		\$0		(\$0)		\$22,308,380		\$142,154,493
2016	\$128,053,607		\$0		(\$0)		\$22,308,380		\$150,361,987
2017	\$136,327,008		\$0		(\$0)		\$22,308,380		\$158,635,388
2018	\$144,675,557		\$0		(\$0)		\$22,308,380		\$166,983,937
2019	\$153,100,671		\$0		(\$0)		\$22,308,380		\$175,409,051
2020	\$163,686,617		\$0		(\$0)		\$56,376,278		\$220,062,895
2021	\$176,601,363		\$0		(\$0)		\$56,376,278		\$232,977,641
2022	\$189,580,832		\$0		(\$0)		\$56,376,278		\$245,957,110
2023	\$202,642,918		\$0		(\$0)		\$56,376,278		\$259,019,196
2024	\$215,770,884		\$0		(\$0)		\$56,376,278		\$272,147,162
2025	\$228,973,888		\$0		(\$0)		\$56,376,278		\$285,350,166
2026	\$242,234,077		\$0		(\$0)		\$56,376,278		\$298,610,355
2027	\$255,569,466		\$0		(\$0)		\$56,376,278		\$311,945,744
2028	\$268,961,419		\$0		(\$0)		\$56,376,278		\$325,337,697
2029	\$282,418,636		\$0		(\$0)		\$56,376,278		\$338,794,914
2030	\$295,930,905		\$0		(\$0)		\$56,376,278		\$352,307,183
Totals	\$3,515,495,214	+	\$0		(\$0)	+	\$798,606,098	=	\$4,314,101,312
	81.5%		0.00%		(0.0%)		18.5%		

In summary, it is projected that the life cycle cost of operating a system driven by MODIFIED projected ADP and capacity needs would be \$4,314,000,000 over a 19 year period starting in 2012 and ending in 2030.

The first year, 2012, would see \$118,020,000 in total expenditures with the Modified projections which is \$20,600,000 less than the Base projected total of \$138,620,000.

In the last year of the analysis, 2030, the annual cost of operations and capital financing would be \$352,300,000 or \$61,400,000 less than the Base projected cost of \$414,000,000.

The staff and operational costs of the system would represent 81.5% of the total costs over the 19 year life cycle and the capital expenditures 18.5%.

Whatever are the final costs of implementing changes in policy, processes and procedures that enable more effective jail population management, it is clear that these costs will be significantly less than the costs of jail construction and operation that criminal justice system policy changes can enable the County to avoid. Over time, as court backlogs are reduced and new case processing and other modified decision-making approaches become routine, greater efficiencies may become feasible, and growth of the jail population may decline even further.



VII. COUNTY ENDORSED BED CAPACITY EXPANSION APPROACH AND FACILITY OPTION STUDIES

A. COUNTY PREFERENCE FOR FACILITY DEVELOPMENT

After review of the Base and Modified facility options described herein the county chose to pursue a third course which features the following concepts:

1. Target the total year 2020 bed count of 2,404 new beds identified in the Base projection of needs found in Chapter III.
2. Subtract from the 2020 Base target the 640 beds represented by the addition of the Sprung structures at the North Campus, leaving 1,764 beds as the revised Phase 1 construction goal. Combined with the existing facilities and the new Youthful Offender addition at North, that results in 5,042 beds at North and Central once Phase 1 is complete. It results in 5,192 beds in the system once the WRRC capacity is added.
3. Consider the Sprung structures part of the county bed capacity inventory through 2020 at which time the facilities may be replaced by new construction.

An Alternate Path

Another path that the county might yet consider is that of using the Modified projection reported in Chapter VI as its departure point rather than the Base projection. If the Modified projection were used the beginning point would be 1,644 beds for Phase 1 minus the 640 beds provided by the Sprung facilities.

In this scenario the county would be adding just 1,004 new beds rather than 1,764 beds. The result would be 4,420 bed system, including Sprung and the Youthful Offender addition, versus the 2,668 beds currently in use.

Part of the rationale of this alternate approach is that if the system changes agreed to by local practitioners are implemented and have the desired effect, the ADP in 2012 is projected to be only 11 inmates higher than it was in calendar year 2007. Thus the problem new capacity has to solve is only that of the overflow from overcrowded direct supervision pods. In that the consultants estimate that this requires only about 400 new beds, the Sprung structures alone more than meet this need thus delaying the time at which new facilities need to be opened. For greater staff efficiency, six new 64 bed pods could open instead and the Sprung structure could be closed and not used until overcrowding again arises (see the staff efficiency discussion with respect to the Sprung concept below).

With this approach the county would save considerable construction money during Phase 1. It might also make more economically feasible the erection of new beds at the Central site. The Central site is preferred by the sheriff's staff because of its operational links with the courthouse and all justice system services and because, again, the county is principally dealing with a pre-trial population and all the court interaction that suggests. Nonetheless, until such an alternate decision is made the consultants have generally examined facility/site options on the basis of the initial direction being considered by the county.



B. THREE PRIMARY FACILITY OPTIONS EXAMINED

Once the extent of future bed needs was identified per county preference and once the conditions and capabilities of the existing facilities were recognized, options for future facility development were created. These options are based on initial gross estimates of component square footage, housing pod needs, and evaluation of existing site possibilities. Testing site possibilities with preliminary concept designs, which are by no means schematic designs, allow the consultants to more accurately determine site feasibility and approach even before programming and design commence. Thus, the county can begin true facility development with a fairly good understanding of their options, even perhaps leading to an early decision as to which direction to follow.

During the course of this study three basic option directions were identified. They are as follows:

1. Expand the existing North facility to provide all needed Phase 1 beds. This option has been dubbed "Option 1, North."
2. Expand the existing Central jail to provide the vast majority of Phase 1 bed needs. This option is known as "Option 2, Central."
3. Meet projected Phase 1 bed needs by substantially expanding at both the North and Central facilities. This is known as "Option 3, North/Central."

There are certainly many variations on these themes, and many derivatives of any of the options. However, it is not the purpose of this study to refine any given concept plan with the objective of coming up with a final plan. That is for later, after detailed space programming has been done and schematic design has been initiated. Rather, it is the purpose of option studies to test general possibilities and to provide information that helps the county choose the best general course to follow in order to satisfy projected bed capacity and support needs while also allowing for future expansion.

Sprung Structures

One significant variable is the addition of two structures by Sprung at the North campus. Sprung structures are ones that are meant to quickly provide bed space in overcrowding situations. On their web site (www.sprung.com) Sprung refers to their product as "an innovative relocatable building designed for diverse semi-permanent and permanent needs..." It is a "stressed-membrane structure, an engineered, relocatable, clear span building alternative." Jails are only one of the uses for these structures.

The county is erecting two Sprung housing structures and a support building as this report is being written. Each housing structure provides 320 new beds of housing. Eight direct supervision dormitories will be in each building for 16 total. The dorms are only 40 beds in size rather than the 56 beds provided in existing direct supervision dry cell pods, or the 64 bed pods selected for future development, because that is the maximum allowed by the state for dormitories.



For master planning purposes the county has directed the consultants to think of the Sprung structures as remaining operational through Phase 1 of the Master Plan, or 2020. After that their continued use is in question with one possibility being their replacement by new, more permanent facilities. These new facilities would be designed consistent with the existing North facility which principally means that a.) the building's exterior walls would be securely constructed, b.) the facilities would come with the full range of support and program space lacking in the Sprung structures, and c.) they would be connected to the main facility for the ease and security of inmate and support service movement.

From a staff-efficiency viewpoint the Sprung structures will be significantly less efficient than the new 64 bed direct supervision single occupancy cell pods that will be built in Phase 1 for the same classification of inmate. They will require roughly 80 staff for 24 hour-per-day, seven-day-per-week (24/7) in-pod coverage. Ten, 64 bed single cell pods would provide an equivalent capacity to the Sprung structures but would only require about 50 staff for 24/7 in-pod coverage. Given current salary and fringe packages of \$46,485 per year per officer, the Sprung concept is about \$1,400,000 more costly annually in pod post terms than the direct supervision single cell pods alternative. And these additional costs come before any other additional costs related to rover officers and other support staff is considered (like transport staff between buildings).

From 2009 through 2020, the Sprung dormitories, at 3% inflation, will cost the county about \$19,800,000 more to operate than the equivalent single cell pods. Therefore, while also taking into account the lesser operational and safety attributes of dormitories, the consultant recommends that long-term planning strategies include the replacement of the Sprung structures by 2020 with more staff efficient designs that also feature stronger environmental and operational benefits.

The pod cost differential calculation appears below. Again, this does not account for other staff inefficiencies inherent in the 40 bed dorms in the Sprung addition.

Pod Staffing Cost Comparison:

	40 bed Sprung dorms	64 bed single cell pods
Beds:	640	640
Pod Size:	40	64
# of Pods:	16	10
Staff per 24/7 Pod Post:	5.01	5.01
Total staff needed:	80.16	50.10
Staff positions rounded:	80	50
Per staff salary & fringes:	\$46,485	\$46,485
Total Annual Pod Staff Cost:	\$3,718,800	\$2,324,250

Annual Difference: **\$1,394,550**

Difference from 2009-2020
with 3% annual inflation: **\$19,791,495**



C. REVISED POD BREAKDOWN

The revised breakdown of new housing pods follows below. Please note that the dorm type pods that had been recommended for Phase 1 are eliminated because the Sprung facilities provide more than enough dorm pods to satisfy that need. Thus all new housing proposed is single occupancy cell construction whether they be dry or plumbed cells.

ADDITIONAL HOUSING PODS:	Pods
TYPE 1; 50 BED, POD REMOTE DORM	0
TYPE 2; 64 BED, SINGLE, DRY, DIRECT (Medium-Min, Substance Abuse)	18
TYPE 3; 56 BED, SINGLE, WET, DIRECT (Classification, Medical classifications)	0
TYPE 4; 48 BED, SINGLE, WET, POD REM. (DDU, Max, Medical Max, Persist Ment, PC, Step Down)	4
TYPE 5; 56 BED, SINGLE, DRY DIRECT/POD REMOTE HYBRID (Inmate Workers)	6
TYPE 6; 50 BED, DORM, DIRECT (Weekender) NEEDS MET BY SPRUNG INITIALLY*	0
TYPE 7; 12 BED, SINGLE, WET, DIRECT (Youthful Offenders) AT NORTH CAMPUS IN ALL OPTIONS	8
TYPE 8; 40 BED, DORM, DIRECT (Minimum, Vocational) NEEDS MET BY SPRUNG INITIALLY*	0

This pod breakdown actually results in 1,776 new beds, slightly more than the 1,764 beds targeted.

D. OPTION ANALYSIS

The options examined below are examined in terms of accomplishing the Phase 1 addition of 1,776 beds. As a reminder, when the options are pursued preparations for a significant increase in beds through Phase 2 should be also be made. If Modified projections are used for Phase 2 an additional 1,868 beds and support facilities would be required. If Base projections are used the Phase 2 requirement would be for 2,144 more beds.

In testing the sites, no assumption is made regarding a change in law that would make many Youthful Offenders Juvenile Offenders. Such a law has been contemplated in the recent past. Should such a bill pass it would remove 50% or more of the Youthful Offenders from the site and thus reduce the future demand for new Youthful offender beds.

1. Option 1, North – All Expansion at North Campus

In this option all of the additional 1,776 beds targeted for Phase 1 expansion would be built at the North campus. The North campus is approximately 9 miles to the north of the downtown Central facility.

In order to execute this option three essential things would need to occur.

- The county would need to acquire more land since the recently added Sprung structures use much of the land originally intended for expansion on the site.
- Support infrastructure, probably at multiple locations, would have to be expanded significantly to accommodate the major increase of beds to the campus (1,776 beds)



plus the 108 bed Y.O addition and the 640 bed Sprung facilities results in five times more bed capacity at North, 3,138 beds, than the original capacity of 614 beds).

- c. The new water retention pond next to the Sprung structures would have to be re-located.

Housing expansions would probably take place at three locations. The first location would be the Youthful Offender addition behind the core to the west, the second would be the primary addition that would probably be at the south of the facility by the kitchen and laundry extending into the adjacent trucking company property, and third, would be at the north of the site east of the core as originally intended to fill the space between the existing building and the Sprung structure, connecting to it if possible.

It is probable at this site that the height of the facility can be limited to that of the existing buildings. However, an alternative if it appears that land area is becoming too limited for Phase 1 additions, Phase 2 additions and all parking needs, is that pods could be stacked higher than they are today.

The chief advantage of the North property is that facilities can probably be developed at a lower cost than they could be at the downtown Central site. Expansion, if the Phase 1 and 2 concept is developed appropriately by the architect, can be readily accommodated in all likelihood as can all long-term parking needs. Another benefit of the North site is that the significantly greater population involved can receive food and laundry services more efficiently since they are all centralized on the North campus.

The biggest design challenge will be to expand infrastructure effectively and economically since the original building was not intended to sustain the magnitude of capacity increase necessary to fulfill all Phase 1 needs, let alone Phase 2 needs. This site began with 614 beds but will conclude with 3,138 after Phase 1, nearly a five-fold increase. This is a substantial issue that should be addressed during detailed planning and programming that precedes the architectural design phase.

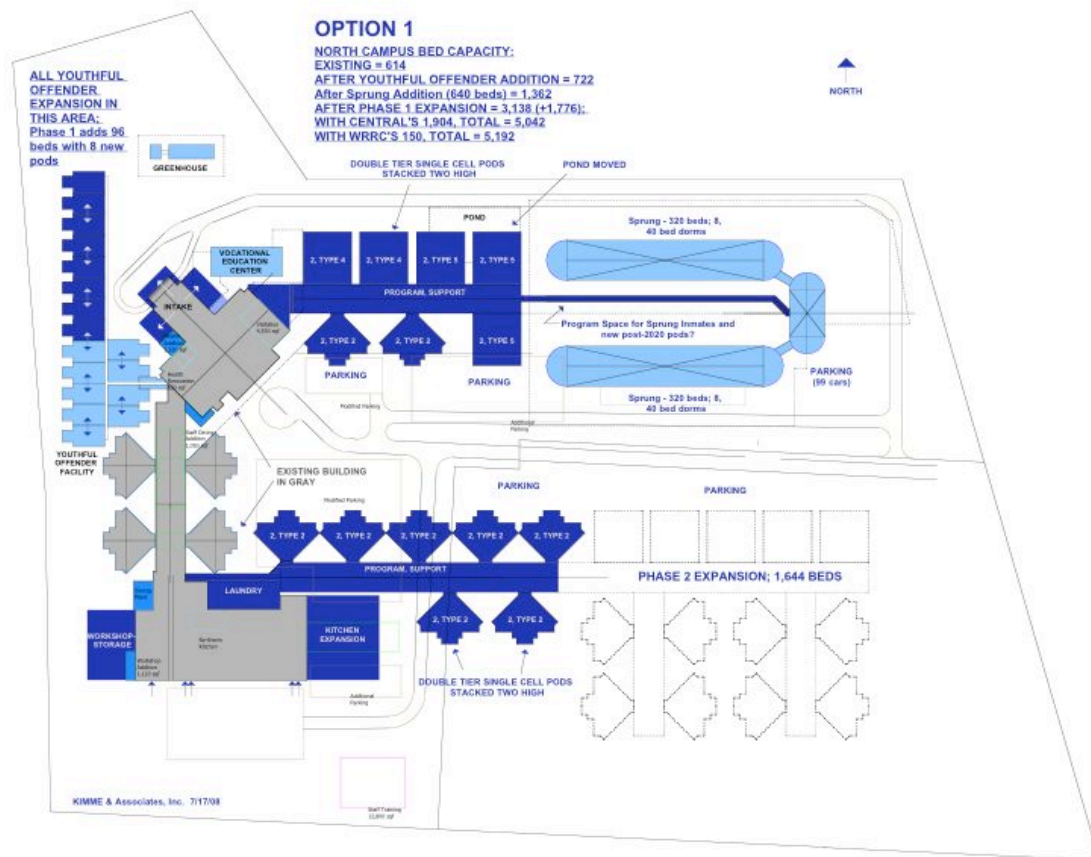
An obvious drawback to the site in terms of accommodating all Phase 1 needs is that of transportation back to the Central facility downtown. After Phase 1, is complete 60% of the total bed capacity of the system will be at North. If Phase 2 occurs there, as much as 72% of the system capacity, including the WRRRC, will be there. If all intakes are centered in the downtown, that means that all inmates who eventually reside at the North facility will have to be transported to and from Central, probably multiple times. If the county simply conducts arraignments at the North campus by video a significant number of transports can be minimized. Another way to mitigate this is to not transfer anyone from the Central facility to the North facility until they have made their first appearance, and hopefully then released from custody. However, unless the county commits to providing complete court facilities at the campus, it is likely that there will be many transports to and from the North campus to Central for the purposes of many levels of pre-trial and post-trial court proceedings. This would suggest a more aggressive parking, staging and court holding capability at the Central facility on the way to the courthouse. Either that or inmates will have to be received directly at the courthouse. However, in doing so they will have to do so in smaller vehicles since the courthouse holding is reportedly not capable of receiving large vehicles like over-sized vans and buses.



Another issue of concern that needs to be examined in follow-up pre-design work is that of splitting special needs and high security populations, having some at Central and some at North. Of particular concern would be the medical and mental condition inmates where it is always more prudent to consolidate the inmates because of special housing design issues and special care requirements involving medical and mental health staff. These populations may need to be split because there is insufficient capacity of this sort at Central to handle a population that would likely double or even triple over the master planning timeframe.

Another issue related to the North campus concerns deficiencies at Central. For example, Central's property storage area is considerably overburdened and inadequate to the task. The storage task is made more challenging because all inmate property is stored at Central. If expansion is at North, it is highly recommended that the program and design look at significantly enlarging property storage at North so that all inmates that go to North from Central bring their property with them. If they must be released at Central, accommodations will have to be made to allow them to bring their property back with them. This process will become a bit of a hassle for staff because those inmates who are unexpectedly released from court downtown cannot be released from the adjacent Central facility but would have to go back to North, go through the release and property distribution process there, and then be brought back to Central for release (largely because past agreements have precluded releases at North).

Below is a test sketch showing how the North site might be developed to meet the Phase 2 bed capacity and support space demands. It also shows that with the acquisition of adjacent sites there is ample room to develop future facilities all in the same vertical scale as current facilities.



Summary Bed Distribution – Option 1, Phase 1

North Campus	
Existing	614
Youthful Offender Addition	108
Sprung Structures	640
Phase 1 Housing	<u>1,776</u>
	3,138 (60.4% of system capacity)
Central Campus	1,904
WRRC	<u>150</u>
TOTAL	5,192



2. Option 2, Central – Primary Expansion at Central Facility

This option proposes building all but the Youthful Offender bed capacity in the downtown area on a site adjacent to the existing Central facility. Youthful Offender housing should be kept together at North. The primary way in which this expansion would be facilitated would be across McDowell Street on the site bordered by Fourth and Trade Streets. On that property presently sits an old parking structure, a new larger parking structure, and a historic church. In order to use the site most effectively, the older parking structure would have to be demolished and its parking replaced by either expanding the newer parking structure or acquiring nearby property, if available, for parking expansion. In order to make the additional facility most secure and efficient it should be connected directly to the existing Central detention-corrections facility. The most effective way to make this connection is via a skywalk rather than a tunnel. Indeed, when the expansion of Central was designed a corridor opening between the 700 and 800 housing towers was provided to facilitate a skywalk connection on one or more levels.

A tunnel would not be as advantageous because there is no good place for that tunnel to emerge in the existing jail such that efficient movement patterns can be established. Additionally, tunneling might involve significant utility relocation in McDowell Street. Aesthetically, skywalks can be quite attractive as is best seen in cities like Minneapolis where they are key parts of the streetscape.

The primary advantage of expanding at the Central site is its proximity to the existing intake complex, the underground tunnel from intake to the courthouse, and therefore to the courthouse itself. In that the population within the detention-corrections system is primarily a pre-trial population with very few sentenced inmates, these relationships are very important in terms of facilitating efficient movement to the courts and secure movement to support services Central and the courts. Additionally, by focusing expansion here it allows for the consolidation of populations that the jail staff feel are most safely and cost efficiently kept together. These groups include medical health populations, mental health populations, and the female population. At present, there are no females at the North facility. Further, disciplinary detention and high security populations can also be kept together in the downtown near the intake center with no requirement that they be moved over county highways to a North facility nine miles away.

In consolidating medical and mental health services housing all of the critical medical and mental health staff and capabilities can be kept at one place thus providing for more cost effective and efficient operations. That is, x-ray rooms, exam rooms and other special facilities that go along with medical and mental health care do not need to be replicated at a second site. Such an occurrence would happen if the new housing was at North because there is insufficient bed capacity of the right design and type, and insufficient medical and mental health support facilities there to accommodate a jail population that will nearly double in size.

Interactions between pre-trial defendants, private attorneys, public defenders and police investigators are all facilitated more readily at the downtown facility which is the primary location of these individuals. Lastly, transportation needs are kept to a minimum if the bulk of the pre-trial population is downtown at the pre-trial facility. In this option, 3,584 beds of the total 5,192 resulting from Phase 1, or 69%, remain downtown near the courts.



There are some disadvantages to building downtown at the Central site. The chief disadvantage is probably that the costs of developing the site and building the facility will probably be considerably greater than they would be at North, or any other more open large property. Developing the site will involve demolition of a parking structure and will be developed with limits on ultimate capacity because of smaller site footprints. It is probable that after Phase 1 the logical place for Phase 2 will be at North. However, a small site footprint can be overcome if the county is willing to build higher than they built at the existing Central facility and its companion expansion. A small footprint, however, brings with it limitations on the ability to develop necessary support space, particularly if the goal is to create either an enlarged new intake center at the ground level, or expanded dock, food delivery and storage facilities.

Overall, the Central location is the preferred location of the Sheriff's Office principally because of the relationships to intake, the court tunnel, local attorneys, and service providers.

It should be noted that even if all of the housing is built at Central, some expansion will still be required at North. With the significantly increased inmate loads, food services and laundry will need to be expanded at North. Additionally, with the advent of the Strung structures an addition of other forms of program and support space should also be made. Another possible area of expansion should be inmate property storage, because property storage facilities at Central are so inadequate and may not be readily expandable. And as noted earlier, all Youthful Offender housing expansion should be done at North.

Below are some sketch studies showing a possible approach to this option.

Please note that the sketch studies test the idea of building in the plaza in front of the existing facility. While the consultant recognizes the possible aesthetic and phasing impact of doing so, there are several reasons why it might be worth studying during the design phase.

- a. It provides an avenue of expansion for ground level intake functions. Combined with moving deliveries and warehousing across the street to an addition there is a real possibility that ample room for long-term intake and sally port parking expansion can be developed. About 20,000 additional gross square feet might be made available.
- b. It takes pressure off of the expansion site across McDowell Street by allowing the development of housing pods in the Plaza.
- c. It is more efficient to maximize the number of pods on the site rather than across the street.
- d. Needed program and support space can be developed near the existing pods for those pods.



Another option, that has been discussed for downtown is to build catty-corner from Central facility and across McDowell Street from the new courthouse. There is more room to develop facilities at this location, which is the strong point of this site option. However, there is probably a significant site acquisition and building demolition cost associated with this approach. Another difficulty with this option is that it is unlikely that a connection between the addition and the existing Central facility could be created. Also, a direct connection between the new facility and the courthouse is unlikely as well. Therefore, movement of inmates from a new downtown facility would require loading the defendants into a van or bus and moving them the half block across the street to the Central facility.

Summary Bed Distribution – Option 2, Phase 1

Central Campus		
Existing	1,904	
Phase 1 Housing	<u>1,680</u>	
	3,584	(69.0% of system capacity)
North Campus		
Existing	614	
Youthful Offender Addition	108	
Sprung Structures	640	
Phase 1 New Youthful Offender	<u>96</u>	
	1,458	
WRRC	<u>150</u>	
TOTAL	5,192	

3. Option 3, North/Central – Expand at Both North and Central

A third option is to build significant amounts of housing at both the Central and the North campuses. By building partially at North the amount of capacity needed at Central could be reduced significantly. Thus, the higher cost of downtown construction and the limited footprint available there becomes less of a problem.

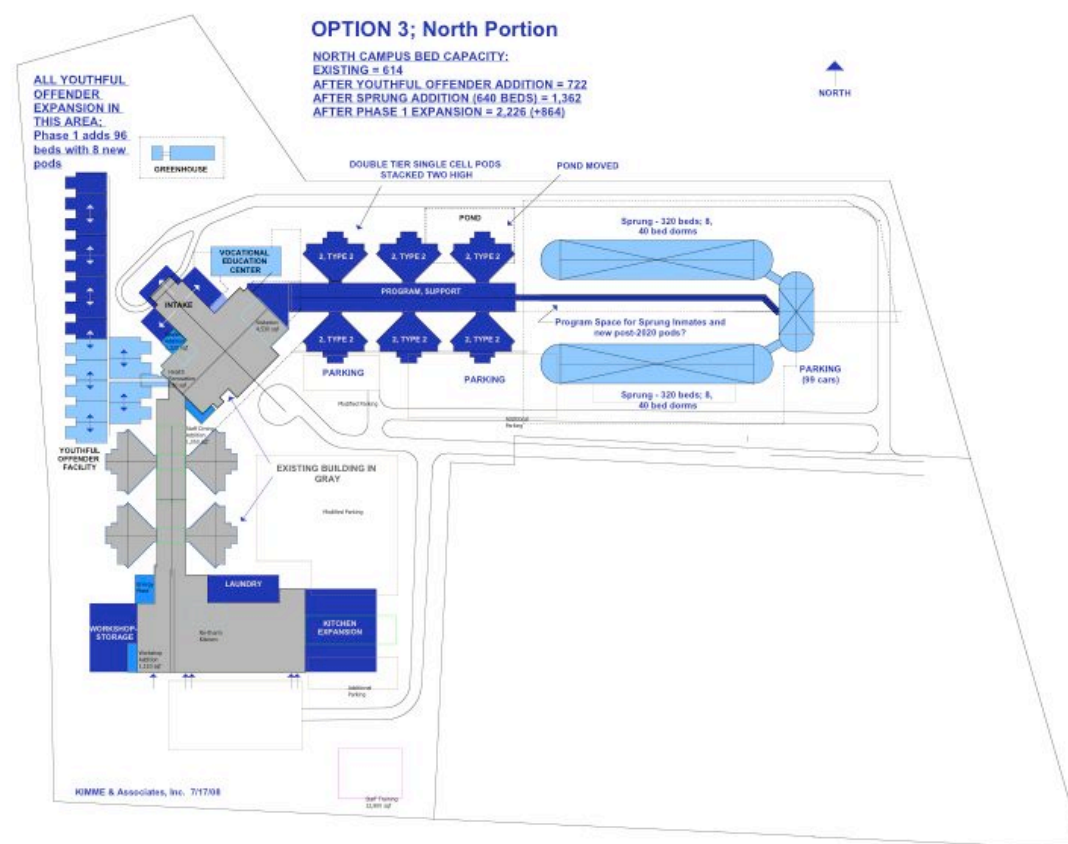
If there is substantial construction at North there is an opportunity to bridge the gap between the existing North facility core and the 640 bed Sprung addition built to the east of the core. The Sprung addition stands alone and is not physically connected to the North facility. Therefore, additional complications arise in terms of moving food, laundry, and other support services to the pods. Additionally, security is diminished by the fact that any movement to the main building cannot be done within the secure perimeter of a single facility. Finally, the Sprung facility is now cut off from the various program, medical health and other support facilities within the North building. By limiting construction at North, pressure to buy adjacent land is also relieved. It also reduces pressure to extensively expand North facility-related infrastructure.

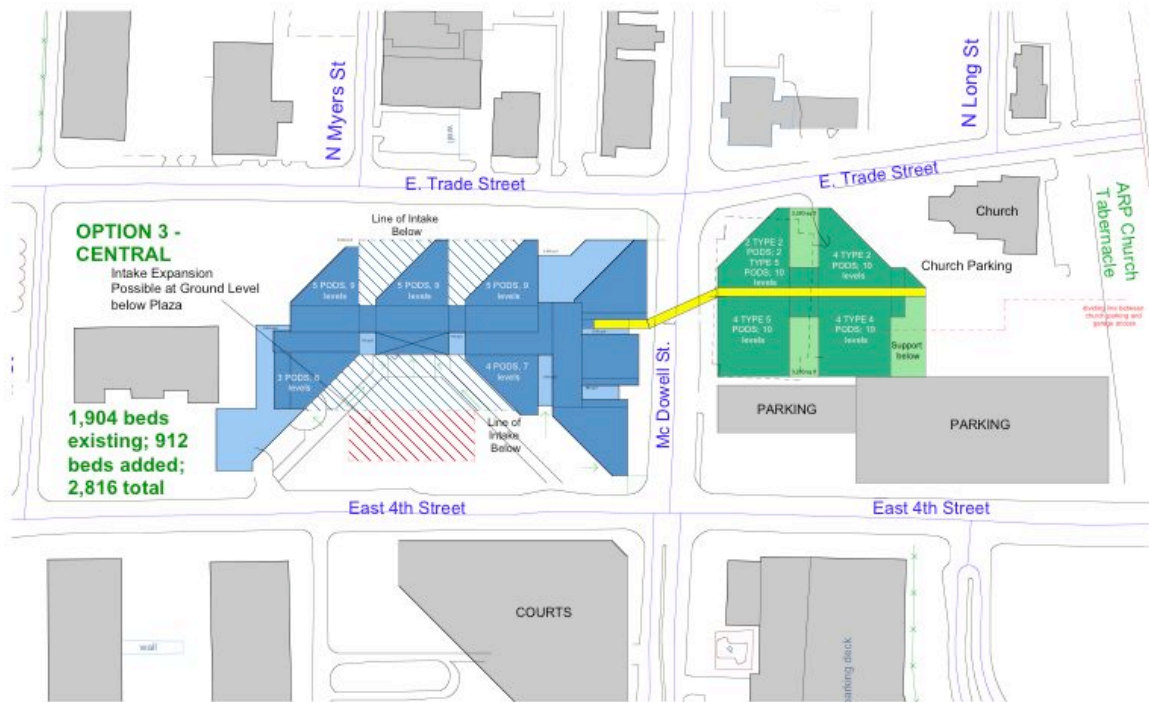
It is estimated that, depending upon the housing style developed, approximately 768 beds of the 1,776 beds could be developed at North to bridge the gap between the existing building and the Sprung structure. The emphasis of the housing would be on direct supervision style



Other facilities at North would have to be expanded as was described in the preceding options. Even in this option, the North campus expands to 2,226 beds, or three-and-a-half times more beds than in the original design. Expansion for food service and laundry would remain the same regardless of option, but property storage would need to be expanded. Administration, visiting, staff support, and all other components would also need to be substantially expanded.

The sketches below show how this dual approach might work for the county. The consultant believes that there is considerable merit in this approach and that it ought to be considered as potentially the best of all worlds. It satisfies the safety and operational preferences of the Sheriff's Office, and partially addresses the county's desire to reduce the costs of new construction by building at the North campus. Phase 2 expansion in this option could occur at both North and Central, as the county sees fit.





Summary Bed Distribution – Option 3, Phase 1

Central Campus		
Existing	1,904	
New Phase 1	912	
	<u>2,816</u>	(54.2% of system capacity)
North Campus		
Existing	614	
Youthful Offender Addition	108	
Sprung Structures	640	
New Phase 1	864	
	<u>2,226</u>	(42.9%)
WRRC	<u>150</u>	
TOTAL	5,192	



E. INTAKE AREA EXPANSION

Expanding the Intake Area may be the most challenging issue faced by the county. The current space and its support parking are at their limit with about 44,000 intakes per year. Projections are for from 58,300 to 67,000 intakes by 2020 and from 72,250 to 83,100 by 2030. The projections are reproduced below.

PROJECTED INTAKES

	AVERAGE	PEAK
2012	49,142	56,514
2013	50,206	57,737
2014	51,293	58,987
2015	52,404	60,264
2016	53,538	61,569
2017	54,697	62,902
2018	55,881	64,263
2019	57,091	65,655
2020	58,327	67,076
2021	59,590	68,528
2022	60,880	70,012
2023	62,198	71,528
2024	63,544	73,076
2025	64,920	74,658
2026	66,326	76,274
2027	67,761	77,926
2028	69,228	79,613
2029	70,727	81,336
2030	72,258	83,097

It is important to understand that when talking about "Intake" space problems there are a series of components that are closely interrelated that complete the intake experience. They should stay together in any plan if possible. These components are now located on two floors at Central (ground & first level) and are the following:

- Vehicle Sally Port
- Arrest processing
- Sobriety Testing
- Intake area
- Property
- Magistrates
- Pretrial Court Services
- Classification

Thus if one talks about expanding or re-locating "Intake" one must also consider how these closely related functions are expanded, moved, or otherwise related.



Generally speaking, with as many as 83,100 intakes projected for 2030, one has to program and design to accommodate as much as 89% more traffic, or nearly double today's flow.

An estimate of current day space shortages appears in Chapter III. It addresses some of the present day space shortages perceived in the areas listed above.

It is clear that current space is inadequate to meet today's needs in certain key areas like parking, arrest processing, intake, and inmate property storage. The magnitude of current and future needs is significant and will not be satisfied by minor renovations or additions, even though the limited renovation-expansion of arrest processing occurring as this report is being written will be helpful.

The options for obtaining needed intake space include the following.

1. Expanding at Central's ground level.
2. Re-building beneath an addition to Central.
3. Building a satellite facility that would tap off all intakes in excess of the current numbers.
4. Completely re-building intake at North.

Reviewing the Intake Options

1. Option 1 - Expanding at Central

This option involves expanding below the plaza area at Central at the ground level and then expanding into the areas now occupied in the center of the ground level by truck docks, service driveways and warehouse areas. Space occupied by boilers, chillers and security equipment would probably have to remain. Acquiring the available areas could increase growth space for intake related functions on the ground level by approximately 20,000 gsf. Existing space behind intake might also be vacated and used for expansion.

Whether or not a useable design and flow can be developed is yet to be tested. However, this probably creates the best prospect for retaining all intake functions at Central where they now exist. Coordinated with this approach, however, will probably need to be a change in strategies regarding inmate property storage. There is simply insufficient space to store the entire system's property as is done now on the First level of Central. Property storage at North should be developed for North inmates to relieve the pressure on this first level area.



2. Option 2 – Rebuilding Under an Addition

This option has possibilities, particularly if the footprint of the addition is sufficiently large to provide the square footage needed. In this scenario, all intake functions on the ground level and first level would be replaced here so that they can continue to be a consolidated set of services. If necessary, the Magistrates could stay where they are if video appearances could be utilized. This would help with retaining public access to Magistrates at the current lobby locations. While most of the intake-related functions are best suited to a single floor design where all movement is horizontal, a two level solution probably would still be the result of this approach.

3. Option 3 – Building a Satellite Facility

This option was discussed by the consultants during the original master plan in 1990 in recognition of the fact that downtown space would be limited and that increased urban and suburban construction and congestion would make it increasingly difficult and time-consuming for law enforcement to use centralized downtown intake facilities. However, there are those that think that the congestion is a good thing because it deters officers from bringing minor offenders downtown because of the difficulties and lost street time involved.

The particular complication with a satellite is simply that all of the primary functions related to intake would have to be recreated there. Therefore, there would have to be vehicle sally ports, arrestee processing and holding, duplicate I.D. centers, pre-trial release components, and so forth. However, since the splitting of the magistrate's function may create staff inefficiencies one alternative would be to do the magistrate appearance by video as noted earlier. The magistrate appearance would seem particularly suited to a video application.

Of course, a satellite facility doesn't solve all intake problems with Central. Arrestees who can not be released from the satellite would still have to be transported downtown unless there was some sort of holding capability at a satellite that allowed the defendants to stay until a first appearance could occur. Also, a video first appearance would reduce movements downtown.

4. Option 4 – Rebuilding Intake at North

One idea is to rebuild intake and its related functions in their entirety at the North campus since there is more land available there. This would shift the focus from the downtown facility to North as the place where law enforcement officers took all arrestees.

This would also imply that all releases would be done at North which would be a significant departure from current practice and potentially in conflict with agreements made long ago with the community that no releases would be done from the North facility. It also means that there would be significant amounts of transports between North and Central for a.) those inmates who are to stay at Central, b.) those inmates who must go to court appearances, and c.) those inmates who must utilize any special services at Central not available at North.



Rebuilding intake at North also suggests that all of the space involved in intake at Central on both the ground level and the first level would be in large part vacated and need to be renovated for other functions whether it be increased levels of court holding and transport functions, additional housing, or additional office and support space.

Rather than build all intake at North perhaps North makes sense as the site of a satellite intake facility.

5. Summary

There is no good and clean answer to this question. As a matter of priority, the consultants would suggest that in the next stage of facility development the option of expanding at Central be studied first given its location and relationships to court facilities. The second best option would seem to be rebuilding intake downtown across the street from, but connected to, Central. It appears to the consultant that the satellite option might a better option than rebuilding entirely at North given the distances involved and the logistics of transport and releases suggested by that option.

In conclusion, this is a very complicated issue that needs detailed operational, staff and facility programming to more accurately define the mission followed by physical plant study before a decision should be made about the proper long-term course. The consultants recommend that this detailed analysis be done well before any final design work is contemplated. Developing a detailed long-term overview of space needs and operational flow should be done before any more short-term minor modifications are done.

On the next page is a table that documents current available space for intake-related functions, current space shortfalls, and projected future space needs.



Mecklenburg County N.C. Detention-Corrections Master Plan

INTAKE - Mecklenburg County, NC

7/18/08

Calculation of Additional Square Footage Currently Needed & Future Estimated Need

	NET SF	EXISTING GROSS SF	REMARKS (from function checklist and consultants)	Additional NET Sq. Ft. needed TODAY	Additional GROSS Sq. Ft. needed TODAY
SALLY PORT:					
GROUND FLOOR					
Vehicle Sally Port (original)		24,393	26 cars originally (938 gsf/car). Current space not adequate for number of arrests made. Inadequate for releases and transfers. Will lose some parking for upcoming Intake expansion. Not uncommon for 5-7 cars parking on dock side at Peak times. ICE Motor Coach blocks drive, must move. (Original program called for 42 parking spots including bus and van parking).		7,000
Vehicle Sally Port extended driveways (detention only)		1,983	No new parking.		
Vehicle Sally Port extended driveways (shared w/support)		825	No new parking; square footage calculation halved due to sharing.		
Sub-total		27,201	1,046.2 GSF per parking spot		7,000
INTAKE-RELATED WITHOUT THE SALLY PORT:					
GROUND FLOOR					
Arrest Processing/Transport		14,299	Entry vestibules, I.D., initial property, open waiting, 4 holding cells, staging areas, 2 transfer holding cells, arresting officer work areas, records, staff posts. Corridor to Courthouse.		1,000
Sub-total		14,299			1,000
LEVEL 1					
Property		5,478	Property (all facilities), male & female dress/shower, finance, property exchange. Property storage deficient (keeps property for North too). Records deficient, mixed in with property & finance; need separate records (adjacent to release and property).		1,370
Magistrates		3,123	7 inmate stations, 3 public stations		0
Magistrate - Pretrial Waiting		1,881	Officer station, toilets, 3, 12 seat areas, 1, 6 seat area		0
Pretrial Court Services		912	6 inmate stations, 2 public stations.		300
Intake (booking)		4,279	6 holding cells, medical exam, storage, toilets, 3 visiting, staff station, 5 seating areas (46 seats). Insufficient space available for processing a large number of arrestees because overcrowding backs-up intake. Intake is adequate after proposed renov. Current release area is separate, but can't handle large prison trip/ICE release on top of normal releases (space & staff issue). Staff workstations and holding cells the issue. Have 3 cells, 8-10 needed. Only 4 cells for Court Staging; more space (holding cells [6-8 more] & corridor) needed to handle today's inmate population. Staffing deficient too.		1,000 1,050 980
Sobriety		2,079	More space than needed. Location poor.		0
Supporting Public Lobby Space		3,000	Abuts magistrates area, court services, sobriety and intake visiting area.		0
Sub-total		20,751			4,700
ADDITIONAL GSF NEEDED:					Additional GROSS Sq. Ft. needed TODAY
TOTAL NON-SALLY PORT		35,050			5,700
TOTAL w/SALLY PORT		62,251			12,700
TOTAL CURRENT GROSS SQUARE FOOTAGE NEEDED:					GSF
TOTAL CURRENT NEED w/out SALLY PORT					40,750
TOTAL CURRENT NEED with SALLY PORT					74,951
FUTURE ESTIMATED INTAKE SPACE NEEDS (EXCLUDING THE SALLY PORT)*:					GSF
YEAR 2020			Derived from projected increase in intakes.		54,000
YEAR 2030			Derived from projected increase in intakes.		67,000
* Detail Pre-design Space Programming still needs to be done and will determine these figures exactly.					
FUTURE ESTIMATED TOTAL SALLY PORT SPACE NEEDS (EXCLUDING INTAKE)**:					GSF
YEAR 2020			Parking for 56 patrol cars, vans, and buses		33,410
YEAR 2030			Parking for 70 patrol cars, vans, and buses		41,990
* GSF per spot is difficult to calculate until the location is determined. For this example 600 gsf/spot was used.					
COMBINED FUTURE ESTIMATED TOTAL SPACE NEEDS (INTAKE & SALLY PORT):					GSF
YEAR 2020					87,410
YEAR 2030					108,990

KIMME & Associates, Inc.



F. COST CONTROL IDEAS

There is frequently a gap between the project scope desired by an owner and their ability to pay for that project. Some elements of project costs are out of owner control such as the market forces that drive costs upward in ways difficult to predict and potentially hurtful to project scope. As has been noted earlier, costs in Mecklenburg County in recent years have risen significantly, particularly in the years 2004 and 2005.

On the opposite side of the question, an economic downturn can slow work and make bidding by both vendors and constructors much more competitive, much to the benefit of the county.

At this early stage of the project the goal is to obtain the 1,776 beds targeted by the county at its Central and/or North facilities. The challenge at the two locations is certainly different in that costs per square foot in the downtown will probably be considerably higher for a Central expansion than they will be on the more open, rural Spector Drive site for the North facility. Site related costs will also be higher in terms of demolition.

1. Building at North

One obvious element of cost control is to focus county efforts on the North campus as opposed to the Central campus.

The only difficulty with this choice is on the operational side. Since the arrestee intake operations and the connections to the courts are at the Central facility, housing increasing numbers of pre-trial inmates at North significantly increases the transportation and short-term holding challenge downtown. These additional operational costs might over time compete significantly with the construction cost advantages of building at North.

2. Dry Cells

One element that may help give the county some cost advantage is that dry cells are projected for 24 of the 28 pods that are proposed for Phase 1. Dry cells have the significant cost advantage of not having plumbing fixtures in the cell. Thus, the cost of the fixtures, the water supply, drain lines, and venting is not part of the cost of the pod construction. The only form of housing pod that is less expensive to build is a dormitory-style pod.

3. Modular Cells

An approach to constructing cells that could save money is to consider the use of modular cells. Most modular cells are built at plants in jurisdictions that may not have the significant cost increase patterns exhibited in Charlotte in recent years. They also have economic and time-of-construction advantages when produced in high volume. Therefore, the county might be able to economically construct and install cells at a fundamentally lower rate than if built conventionally.

Additionally, normally plumbed modular cells might be configured to accommodate the dry cell concept anticipated in 24 of the 28 pods proposed. Because of the high volume it is probable that manufacturers would adapt their modules to not have pipe chases and



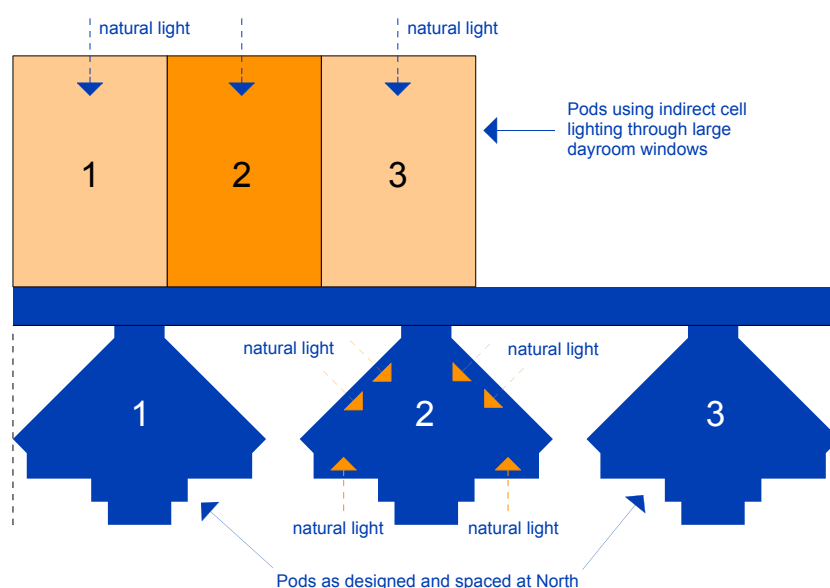
plumbing fixtures. Otherwise, it is likely that the county could purchase the modules with pipe chases but not install plumbing fixtures. The chases then could be used for all of the heating and cooling duct work and smoke detection that is otherwise provided through other means including duct work under second tier walkways that effectively raises the height of mezzanine cells above the floor. This makes the second tier cells less observable, and requires longer, more costly and less safe stairways. They may also raise the height of the building overall, and thus the cost per cubic foot, of the housing pods.

4. Indirect Natural Lighting of Cells

Another opportunity to save might come from an opportunity presented by the North Carolina Administrative Code under section 10A NCAC 14 J. This section essentially outlines jail construction and operational standards. Section 10A NCAC 14J.1214 (d) regarding windows and glazing says the following:

"Natural light shall be admitted into all confinement units either directly or indirectly."

By allowing natural light to be admitted indirectly, it potentially allows the opportunity to admit light to cells (or confinement units as the standards call them) through large dayroom windows and/or skylights in combination with half or fully glazed cell doors. In this scenario there would be no cell windows. As a result of this approach, the housing pods would make a far smaller footprint, would have far less exterior wall, and therefore probably cost considerably less. Environmentally, the principal loss would be that of windows in each cell. On the other hand the amount of light in the dayrooms, which is where inmates spend most of their daytime hours, would probably be increased considerably, particularly if American Correctional Association (ACA) standards are followed. Before this option was pursued however, confirmation of compliance with applicable general building codes is recommended. A diagram follows which contrasts the two design approaches. Existing Pods at North as they are presently laid-out are the triangular shapes in blue, while the indirectly lit pods are in orange.





5. Redundancy of Pod Design

Another factor that works to the advantage of Mecklenburg County's costs is the redundancy of the pod design that will be developed for an expansion project. Based on the recommendations of this report there are only three pod types that need to be developed. Of those 28 pods, 18 of them are dry cell pods that should be identical in design and construction. Four (4) of the pods are wet cells that are similarly designed and constructed and the other six (6) are a different type of dry cell pod that should be similarly designed and constructed. These redundancies should produce a benefit in terms of design and engineering efficiency and should make construction more routine and hopefully, less costly throughout the facility.

6. Add Alternates

Another important element of cost control to consider is that of designing a facility that reaches the 1,776 bed target but does so through one or more "Add Alternates." For example, if the county believes that a conservative cost estimating approach results in the likelihood that only 1,200 to 1,300 beds can be attained, a design which features Add Alternates could be useful to develop. In such an approach the base bid sought from contractors would be for the 1,200 to 1,300 beds per the budget estimate, but would feature a complete design for the 1,776. The remaining beds would be bid upon as one or more separate items, accepted only if the bids are lower than expected thus making more initial capacity affordable.

7. Shelling

Another approach is to consider options that involve significant amounts of shelling as part of an Add Alternative program. In this scenario, the shell of certain amounts of housing is identified as an Add Alternate to see if at least that much could be built. This makes the later retrofitting of equipment and finishes much quicker and less expensive than having to build the additional pods in their entirety at a later date. The shelling strategy might also work if there's a belief that construction costs are particularly high at this moment but that increases might slow by the time of bidding (roughly late 2009, early 2010). Recalling the cost tables presented in Chapter III, the construction cost inflation rate in Charlotte according to the R.S. Means Company was only 2% per year from 1990 through 2004 and in 2007 fell to 3.8% from a high of over 13%.



VIII. CONCLUSION

A. NEXT STEPS IN THE PROCESS

The following are the next steps in the process recommended by the consultants:

1. Review the contents of this report and continue to work toward implementation of the changes in criminal justice system practices and policies described in Chapter IV that are fundamental to mitigating inmate population growth and avoiding significant future detention-corrections facility capital and operational costs.
2. Finance the staff and support elements needed to attain the changes essential to the cost avoidance forecast by the consultants.
3. Initiate a more detailed study of Intake options and needs after complete, operational, staff and space programming for this area has been completed.
4. Evaluate the various facility options described in the report, do whatever follow-up study work that is needed, including staff and operational analyses, to facilitate choice of an option, and then select the course to follow in future facility development.
5. Initiate the detail space, staff and operational programming process that is the key to effective facility design.
6. Acquire the necessary properties to create the required site for additional facilities.
7. Confirm a project budget.
8. Initiate the design process.
9. Construct the new facilities.
10. Conduct an effective operational transition during and immediately after construction in preparation for moving into new facilities.
11. Occupy the new facilities.
12. Continue to monitor progress with, and adherence to, the criminal justice system policy and procedure changes outlined in this report.

The consultants wish the county success in this endeavor. They also appreciate the opportunity to work with the fine professionals of Mecklenburg County in producing this master plan report.